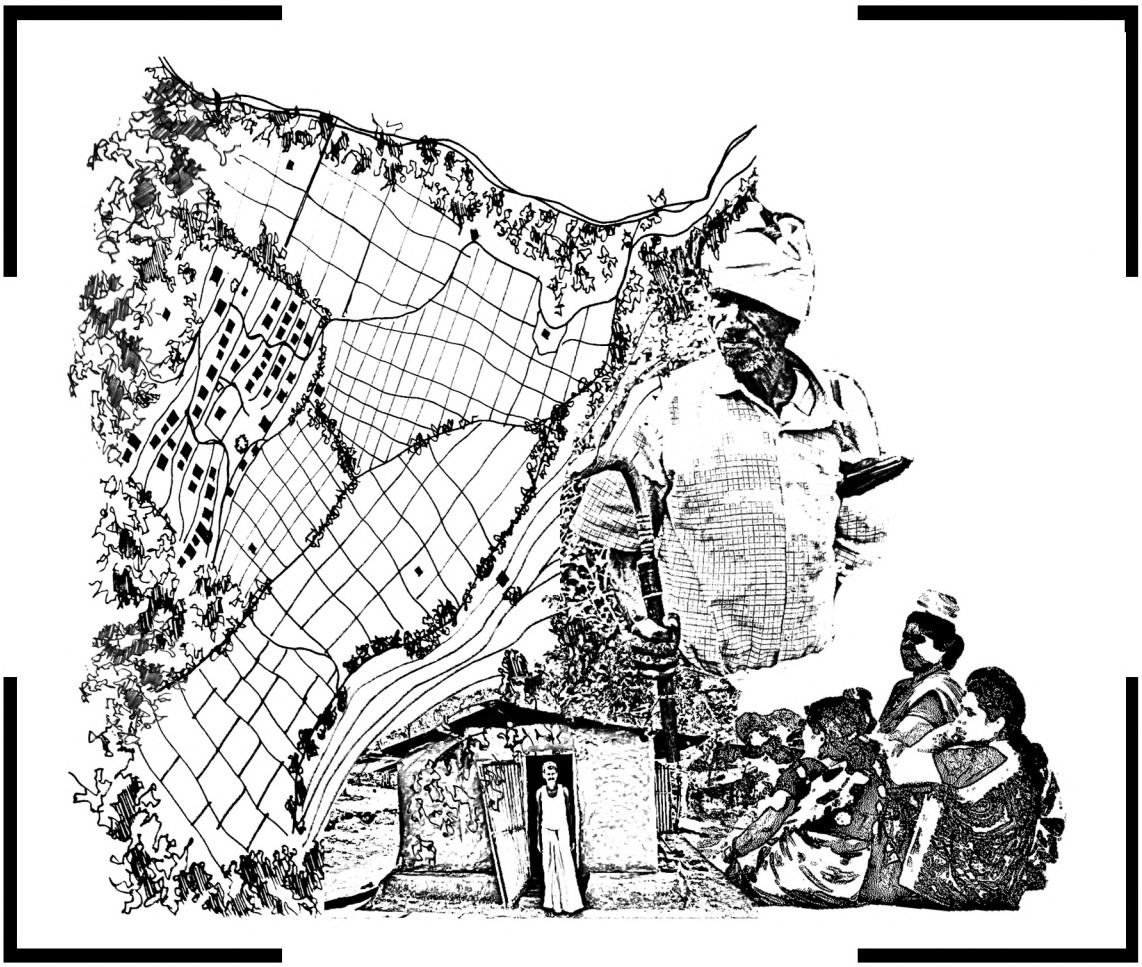

An Ethnography of

Housing of Muthuvan Community

in Idukki District of Kerala: Prospects and Policy

Directorate of
Kerala Institute for Research, Training, and
Development Studies of
Scheduled Castes and Scheduled Tribes (KIRTADS)

An Ethnography of
Housing of Muthuvan Community
in Idukki District of Kerala: Prospects and Policy

A Report submitted to The Ministry of Tribal Affairs, Govt. of India
(CSS Project 2018-2019)

Anthropology Research Wing
Kerala Institute for Research, Training, and Development Studies of
Scheduled Castes and Scheduled Tribes (KIRTADS),
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Foreword

Providing a comfortable place to live in is a fundamental element of human dignity. Over the years housing projects have tended to lose precision and focus more on bureaucratic terms without giving any say to the people who live in the houses. Now KIRTADS has taken new ground after elaborate fieldwork and consultations with key stakeholders, particularly the Scheduled Tribe Muthuvan community in Idukki district and depicts the missing elements of Tribal Housing projects in Kerala, providing the say of indigenous community, without altering their community cohesiveness. I believe this study report will make a frank self-assessment of bureaucracy in designing housing projects in future for indigenous groups such as the Muthuvan community in Kerala and modify practice. I would request the institutions to take this study into account while designing the future housing projects amongst the Scheduled Tribes in India.

The present study, "An Ethnography of Housing of Muthuvan Community in Idukki District of Kerala: Prospects and Policy" is a project sanctioned by the Ministry of Tribal Affairs (MoTA), Government of India to KIRTADS, in the year 2018-2019, via its Centrally Sponsored Schemes (CSS). I heartily congratulate the transdisciplinary research team of this project for depicting anthropological insights on one of the timely issues that policymakers in the country are seriously looking forward to. I wish the team all the success.

Dr P. PUGAZHENDI IFS
Director KIRTADS

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The project team has received immense support from the following Kerala State authorities — Director, Scheduled Tribe Development Department, Tribal Development Officers, Tribal Extension Officers and Tribal Promoters of Idukki district. The Chief Conservator of Forest - Kerala, District Forest Officers of Marayoor and Munnar and Assistant Wildlife Warden, Chinnar Wildlife Sanctuary facilitated the project team to engage in data collection within the forest areas and wildlife sanctuaries in Idukki district.

The proposal for this research was prepared by Mr. Madhu Narayanan, Research Assistant (Anthropology- on leave). Mrs. Smitha Sivadasan, Research Officer-KIRTADS; Mrs. Seema, Mr. Shagil TTK and Mr. Nishanth Krishnan- (Research Assistants), and Mr. Shameer Shareef (Clerk) also provided help towards the project at various stages of the research.

We acknowledge the support of each and everyone who has contributed towards the successful completion of this project.

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Chapter One

Introduction

The Problem

1.1 Policymaker in India recognises housing as one of the primary objectives of welfare measures and development schemes since the first five-year plan. They have allocated considerable funds towards reducing homelessness in India ever since. Over the years, it has provided the Government of India and various State Governments in the country various fiscal incentives to support homeless people to get shelter. Several schemes have been launched by policymakers towards achieving the dream of providing a house for all. Recent statistics show that 1.77 million people in India cannot meet the fundamental human need of having a shelter (Census 2011). Studies, also report an increase in the rate of homeless people in India. This rise in homelessness is also a reflection of the predicaments of our housing policies and schemes. This situation calls for in-depth studies and broader engagements to understand the real issues, to resolve them and strengthen the housing policies and schemes in India. This study attempts to examine the drawbacks of housing policies and schemes that are implemented for the tribal communities in the country and Kerala in particular.

"Housing was used as a form of cultural domination to force assimilation ofIndigenous people".
-Patrick Troy

It can be observed that the housing schemes and policies in India, like elsewhere in the world, have become a significant force of cultural assimilation of tribal communities to the rural social life and has led to high rates of cultural loss, social distractions, ecological damages and various other issues that tribal communities encounter in today's time.

1.2 This study is an attempt to understand the issues mentioned above, which are relatively unexplored in the domain of housing policy studies in India. Or, on other words, this study aims to explain the drawbacks of existing housing policy and its implementation among the tribal communities, examine the transformation of traditional housing and habitat practices of the Scheduled Tribe - Muthuvan community of Idukki district in Kerala. The ST- Muthuvan community has unique cultural and social practices associated with their housing and habitats, which differs from any other mainstream or scheduled communities in the country. The study critically evaluates the implementation of the various housing schemes and policies among the Muthuvan community and exposes the impeded predicaments of the existing housing schemes and policies, to provide vivid and detailed policy recommendations in the field.

1.3 The implementation of housing schemes and policies designed for general communities among the tribal people without considering the cultural and social aspects associated with housing and habitat has impacted the community under study adversely. Paradoxically, it also contained a violation of the basic principles, priorities and the modalities of mainstreaming or carrying out development measures among the tribal communities. The National Tribal Policy (Draft) in the year 2006 mentions that the interventions among tribal communities should not harm the culture and social institutions of the tribal communities. The ongoing housing schemes implemented among the tribal community under study reveals that they harm their social and cultural institutions, along with the existing sustainable livelihood of the community.

To explain the drawbacks of existing housing policy and its implementation among the tribal communities, this study aims to examine the transformation of traditional housing and habitat practices of the Scheduled Tribe - Muthuvan community of Idukki district in Kerala.

1.4 The Article 366 (25) of the Constitution of India defines Scheduled Tribe as "such tribes or tribal communities or part of or group within such tribes or tribal communities as are deemed under Article 342 to Scheduled Tribes, for the purpose of the

Constituion". In anthropological sense, the tribes or indigenous communities, are generally considering as the communities who were not incorporated into the caste hierarchy, and those who have been able to maintain a self-sufficient and straightforward way of life, inhabiting in geographically isolated or semi-isolated parts of the country (Sasktisena 2017). There are approximately around 550 Scheduled Tribe communities in India, and they comprise a total population of 10,42,81,034 as per the 2011 census of Government of India. Among them, 37 Scheduled Tribal communities live in the state of Kerala whose total population is 4, 84,839 which forms 1.45% of the total population of the State.

1.5 These diverse Scheduled Tribe communities in India have a unique and distinguished social and cultural life. As mentioned earlier, many of these tribal communities had an efficient economical and political system. The prospect of mainstreaming these tribal communities has broader acceptance in the government policies from the very beginning. Theoretically, the State has always intended to protect the unique social and cultural life of the tribal communities. The preservation and documentation of indigenous knowledge and wisdom are also primary concerns of the Government. It is observed that the Governmental housing interventions among the tribal communities have produced more adverse effects than benefits to these communities. Most times, there is little effort put into understanding the housing requirements of the tribal communities in India. In this context, the Government must engage actively in ensuring a tribal policy to protect and save India's diverse tribal communities from the perils of development. The predicaments in implementing existing housing policies and schemes among the tribal communities should be reconsidered in the purview of such legally sanctioned tribal policies.

1.6 According to the social theories of housing, houses are not mere structures, and it is more than just design or architecture. There are several social and cultural factors embedded into a house, and the cultural and social realities play a significant role in designing the house. The social life of people and the culture of a community are indispensably connected with the allocation of spaces within the house and between the houses. However, the social and cultural aspects of housing are largely neglected in the

In the National Tribal Policy (Draft) of the year 2006, it is mentioned that development interventions among the tribal communities should not harm the culture and social institutions of the tribal communities.

hitherto housing policies in developing countries, where the practices of social sciences, especially the anthropological and ethnographic studies are not sufficiently incorporated into the housing policy studies.

1.7 In developed countries, studies carried out to aid the formation of housing policies are interdisciplinary and employ multiple methodologies. For example, anthropology and ethnography are incorporated in housing studies in order to understand the social and cultural underpinnings of the community with their dwelling places. The social and cultural aspects of housing are of great importance to the culturally distinctive indigenous and tribal communities, where the theoretical and methodological contributions of anthropology and ethnography have high potentiality. The ethnographic studies on housing try to understand the cultural and social realities of houses and hamlets and thereby help propose a model of housing that fits well with the community, and houses that do not lead to short term or long-term cultural or social destructions to the community or the environment in which they are dwelling.

1.8 It was in this context that the Kerala Institute for Research, Training, and Development Studies of Scheduled Castes and Scheduled Tribes (KIRTADS) decided to undertake the study titled "An Ethnography of Housing of ST Muthvan Community in Idukki district of Kerala : Prospect and Policy". The study aims to understand the existing problems in the implementation of housing schemes and policies among the Muthuvan community. It also intends to draw the attention of the Ministry of Tribal Affairs – Government of India and Government of Kerala, and Tribal Development Department, to take an interest in these issues and to frame an independent housing policy for the Tribal communities, and Muthuvan community in particular.

Review of Literature

1.9 Studies on housing traverse across the disciplines of anthropology, sociology, history, psychology, economics, architecture, and philosophy. The housing studies make significant contributions; it rejects the popular understanding of housing as a material capital, and contributes in the form of theories as well

as policies. Housing is a multi-faceted topic and not merely a theoretical debate. Hannu Ruonavaara (2018) has explained 'housing choice, homemaking, homelessness, the history and organization of social housing, housing equity release, residentials egregation, squatting, self-building, privatisation of public rental stock, housing policy, neighbourhood community, et cetera as housing-related topics'.

1.10 This study, "An Ethnography of Housing of Muthvan Community in Idukki District of Kerala: Prospect and Policy", in fact do not aim to engage with the academic endeavour of theorising housing or housing-related issues. Instead, it focuses on understanding the potential aspects of traditional constructions and evaluating the existing housing schemes and finally providing a policy recommendation for the housing issues among tribal communities and the issues of the Muthuvan community in particular on their housing requirements. The Muthuvan community has been facing the adverse effects of the existing housing schemes implemented for them, which did not consider their social and cultural needs during implementation. For the same reason, the critical evaluation of the existing literature on housing, across the discipline is avoided, and instead of the literature which defined the concept of ethnography of housing, housing policies in India are examined here. Jim Kemeny, a pioneer in the area of housing studies, has presented his theoretical arguments in the two acclaimed books, The Myths of Home Ownership (1981), and Housing and Social Theory (1992). He argues that the countries where homeownership dominates generally have a poorly developed welfare system, whereas countries where non-profit rental housing dominates usually have a well-developed welfare system, this reflection on the ownership and the social reality of welfare of the state was later known as Kemeny thesis in housing studies. Kemeny studies attracted criticism, but his contributions are considered valuable in understanding the multifaceted requirements of housing. And more interestingly, Kemeny contributions accelerated the use ethnography as primary methodology in housing studies.

1.11 Jim Kemeny's contributions to housing studies have paved new paths of qualitative research in the

The study aims to understand the existing problems in the implementation of rural and urban housing schemes and policies among the ST-Muthuvan community. It also intends to draw the attention of the Ministry of Tribal Affairs – Government of India and Government of Kerala, and Tribal Development Department, to take an interest in these issues and to frame an exclusive housing policy for the Tribal communities, and Muthuvan community in particular in the nearest future.

shaping of housing policies. Earlier, the housing studies were dominated by quantitative research which did not look into anything beyond material costs and material interest in the matter of housing. Kemeny articulated a different concept of embeddedness of housing, which argues that housing is an integral part of society that should not be seen as separate from the social structure of the culture of that particular society. In his second book, he criticized housing studies 'for neglecting the theoretical debates in the various social science disciplines and keeping itself in a single housing studies bubble into which outside influences reached only belatedly.

1.12 Ethnography is primarily a qualitative research methodology, its tools and techniques were developed by anthropologists in the early 20th century, which have been widely used in the housing studies in order to make culture-centric housing policies, especially in the developed countries. Ethnography is defined as a descriptive study on human society, culture, rituals, and customs from an insider perspective. From its beginning, this methodology of anthropological research has shown much potential in explaining the local and distinctive culture and social organisation of people. For the same reason, this particular research technique has been widely applied in various field knowledge production and policy studies.

Jim Kemeny argues that the countries where home ownership dominates generally have a poorly developed welfare system, whereas countries where non- profit rental housing dominates usually have a well-developed welfare system, this reflection on the ownership and the social reality of welfare of the state was later known as Kemeny thesis in housing studies.

1.13 Since the 1970s, ethnographic research has been used extensively in housing studies in developed countries. More interestingly, a decline can be observed in quantitative research in housing studies in the later period. The growing importance of qualitative research in the field of housing, particularly after the contributions of Kemeny and Lowe (1998), and Oxley (2001) provided a broad scope for ethnographic research in the field. The same interest for qualitative research and ethnographic methodologies has not yet made its way into the housing studies in countries like India, where quantitative research continues to support the authority in framing housing policies. Richard Ronald (2011) in his article "Ethnography and Comparative Housing Research" questions the use of quantitative measures which neglect not only local diversity in research but also the usefulness of qualitative research design that fails to embed informant discourses with the material, cultural and historical context.

He argued that the objective is to champion ethnographic strategies in international housing research, not as an alternative, but as a means to enhance understanding of culture, diversity, and context and thereby in the application of other measures and methods.

1.14 As Ronald (2011) argues, the very nature of housing is subject to specific indigenous practices that are fundamentally shaped by cultural meanings attached to dwellings as well as social and family practices related to home and property. Further, he adds that qualitative/ethnographic investigations that attempt to capture subjective dimensions of social reality have consequently become increasingly common in housing studies. As mentioned, the scope of the ethnographic methodology is underutilised in the hitherto housing studies in India; henceforth, there are existing problems in the current housing policies of the country.

Objectives of the Study

1.15 This study has four major objectives. Firstly, it aim to understand the ethnographic aspects of traditional housing practices of Muthuvan Community and study the changes in housing practices and the impact of various housing schemes implemented for them, over time. Secondly, it explores the architectural aspects of traditional house construction and housing practices among the Muthuvan community. Thirdly, the study evaluate the existing housing policies implemented among various Muthuvan hamlets, and fourthly, it aims to propose new policy recommendations to the Government in order to solve the existing issues in the tribal housing.

Methodology

1.16 To attain the objectives mentioned above, the study has used interdisciplinary approaches by employing ethnographic research methods. Three disciplines - anthropology, architecture, and economics have been employed in this investigation. Among these disciplines, anthropology has played the primary role, and the researchers of architecture

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and economics have supplied their dimensions for the anthropological analysis. Based on the research design, researchers from all three domains have together carried out the fieldwork.

1.17 The ethnographic fieldwork for the study was carried out in selected Muthuvan community settlements in Marayur, Kanthallur, Edamalakkudi, Munnar and Adimali Panchayaths of Idukki district, Kerala. The fieldwork was carried out in four phases. The first phase of the fieldwork was conducted from 27th February 2019 to 4th March 2019, in Thayannakudi and Mulakampetti Kudi in Chinnar Wildlife Sanctuary. From 11th April 2019 to 4th May 2019, the second phase of the fieldwork was carried out in Nellipetti Kudi, Wengapara Kudi, Periyakudi and Kuthukkallu Kudi of Marayoor forest division of 27th February 2019 to 4th March 2019, in Thayannakudi and Mulakampetti Kudi in Chinnar Wildlife Sanctuary. From 11th April 2019 to 4th May 2019, the second phase of the fieldwork was carried out in Nellipetti Kudi, Wengapara Kudi, Periyakudi and Kuthukkallu Kudi of Marayoor forest division of Marayoor Panchayath and Kulachuvel Kudi in Kanthalloor Panchayath. The third phase of fieldwork was conducted in Edamalakkudi in Edamalakkudi Panchayath in September 2019. The fourth phase of the fieldwork covered in Adimali and Vattavada in November 2019.

1.18 Workshops were also utilised as a potential source of information and insights from different sources. Information was gathered from people with expertise in the field of tribal studies, housing studies, and scholars in various fields, Government officers, stakeholders, and community members. Five workshops were organised at different phases of the project. The first was conducted on December 11th, 2018, at KIRTADS. The workshops were attended by community members, tribal house construction contractors, community stakeholders, and researchers from various disciplines. The first workshop focused on insights for the research design for the project.

1.19 The second workshop was conducted on "Understanding the Problems of Housing among the Muthuvan Community" in Marayoor Panchayath of Idukki district on 8th March 2019. Community members and tribal promoters were invited to attend

this workshop. It aimed at gathering reflections of the community members on their local settings, housing requirements, and the present policies. During this workshop, we also gathered information regarding housing schemes that were implemented in these places.

1.20 The other three workshops were organised as a series in Munnar on 5th and 6th of November 2019. It covered the major disciplinary dimensions of the study, such as anthropology, architecture, and economics per se. The attendees included community members,tribal development officers, officers from the forest and wildlife department, agriculture department and also scholars engaged in studies among the Muthuvan community. All of them offered their diverse points of view. After every presentation, there were open discussions in which the community members actively engaged.

Conceptual Frames

1.21 This study tries to examine and analyze the housing issues among tribal communities through four conceptual frameworks. Two of these frameworks are intertwined and hold relevance in global, national, and local contexts of the problem. Firstly, the study had given the emphasis on the culture-centric view of the National Tribal Policy (Draft) of the year 2006. This frame drives attention to the social and cultural aspects of the community while planning housing or related policies among tribal communities. Any engagement and intervention among the tribal communities must give due consideration to their cultural and social institutions.

1.22 The study considers sustainable models of development as the solution to the issues in housing among the tribal communities. Sustainable development includes achieving economic as well as social sustainability without corrupting natural resources or disrespecting the social and cultural institutions of the community. Many of the tribal communities lead a sustainable way of life, but unscientific policies and schemes had negatively affected their sustainable livelihoods. However, since the UN declaration of Sustainable Development

The ethnographic fieldwork for the study has been carried out in selected Muthuvan community settlements in Marayur, Kanthallur, Idamalakkudi, Munnar and Adimali Panchayats of Idukki district, Kerala.

Goals, sustainability has become a significant concern and central focus of policy studies across the globe.

1.23 This study also tries to examine the existing housing policies based on the recommendations made by various committees towards protecting the Western Ghats. It is an essential fact that most of the tribal communities in Kerala inhabit in ecologically sensitive zones of Western Ghats in India. The Western Ghats are known for biological diversity along with its geological, cultural, natural and aesthetic importance. For the same reason, UNESCO listed the Western Ghats as one of the world's most important heritage sites and the "hottest hot spot" of the biological diversity in 2012.

1.24 The unrestrained mining and development activities for the construction of houses and buildings have led to drastic erosion and damage to the Western Ghats in recent times. The demands for affirmative action to protect the environment and ecologically sensitive areas of Western Ghats are also prevailing in policy level since the 1970s. Later, the Central Ministry of Environment and Forests (MoEF) appointed various committees and panels to examine the issue and offer suggestions and recommendations in order to implement new policies to protect the Western Ghats. The first of its kind was appointed in the year 2000 by the Ministry of Environment and Forest (MoEF), under the Chairmanship of Pranab Sen. The Pranab Sen Committee provided guidelines to understand the ecologically sensitive areas. The ecologically sensitive areas are also known in the literature as 'no-go'or as inviolate areas. The Pranab Sen Committee report perhaps influenced the policymakers and environmentalists to pay more attention to the environmental issues in India.

The study considers sustainable models of development as the solution to the issues in housing among the tribal communities. Sustainable development includes achieving economic as well as social sustainability without corrupting natural resources or disrespecting the social and cultural institutions of the community.

1.25 At least for the next ten years, the Pranab Sen Committee guidelines were not taken into consideration for making an adequate action plan to mitigate environmental destruction in India. In 2011, the same Ministry of Environment and Forest (MoEF) with the pursuance of the directive of the Group of Ministers (GOM) constituted a committee headed by T. Chatterjee.They were mandated to formulate objective parameters for the identification of inviolate forest areas in India. Around the same period, in March 2010, the Western Ghats Ecology Expert Panel (WGEEP). and eminent ecologist Madhav Gadgil.The WGEEP is also known as the Gadgil Committee.

1.26 The study recommendations of Gadgil Committee spread anxiety and fear among people, political parties and religious groups, especially those who inhabit the regions adjacent to the Western Ghats. On 31 January 2012, the Government of Kerala had filed an objection to the Ecological Sensitive Area (ESA) zonation proposed by the Gadgil report on the grounds that the State had unique features and the need for addressing them did not reflect in the zonation, specified for the Western Ghats region. Later, by considering the critical comments and suggestions made by different stakeholders including State Governments and Central Ministries on WGEEP Report, the MoEF constituted a High-Level Working Group (HLWG), headed by the distinguished scientist and former ISRO Chairman Kasthurirangan, to suggest a holistic approach for sustainable and equitable development while keeping in focus the preservation and conservation of ecological systems in Western Ghats. Both these reports suggest measures to protect the Western Ghats, but the government was forced to give up these proposals due to the massive and violent resistance from the public. The state government of Kerala set up a three-member expert committee on 29 October 2013 headed by Oommen. V.Oommen, Chairman of the Kerala State Biodiversity Board (KSBB), to study citizens' concerns on the HLWG report. The Oommen V Oommen committee was mandated to look into the particular situation in Kerala and report it to the Central Government.

1.27 The fundamental problem with both Gadgil and Kasthurirangan reports is its lack of cultural perspectives while dealing with the issue (K 2019). The reports do not provide a holistic policy recommendation that interrelate ecology, biodiversity and human interaction. In anthropology as in some other disciplines, the focus the relationship between people and the environment is not new.Anthropologists working in the area often refer to it as ''ecological anthropology,' and have been studying the relationship for over 100 years. The existing reports have not considered the paradigms of ecological anthropology nor referred to its methodology and insights. The present report has tried to frame its arguments on shaping housing policies for Tribal communities by considering all these facts, along with subscribing insights from

The present study also tries to examine the existing housing policies by considering the recommendations made by various committees towards protecting the Western Ghats. It is an important fact that most of the tribal communities in Kerala are inhabit ecologically sensitive zones of Westen Ghats in India.

anthropological methods.

1.28 The study also tries to observe and examine the existing housing and construction trends in the purview of Nava Kerala, literally meaning new Kerala, envisioned as a resilience and recovery policy framework by the Government of Kerala, after the drastic natural calamities that the state has witnessed consecutively in the year 2018 and 2019 in the form of large scale flood across the state, and numerous landslides in the hilly areas of Idukki, Malappuram, Wayanad and Palakkad districts. Hundreds of people lost their lives, land, means of living, and several became homeless in the state after these environmental disasters. Studies now argue that both these calamities caused anthropogenic hazards and demanded recovery policies are to recuperate from the damages.

1.29 In the aftermath of the flood that hit the everyday life of a large number of people across the state, the Government of Kerala commissioned a Post Disaster Need Assessment (PDNA) study collaborating with international partners like the European Union, World Bank, and Union System to assess the recovery requirements of the state. PDNA presented four- pillar areas as the frames to build Nava Kerala. The four pillars are 1) Integrated Water Resource Management (IWRM), 2) Eco- Sensitive and Risk-Informed Approaches to Land Use Settlement, 3) Inclusive and people-centered approaches, 4) Knowledge, Innovation and Technowledge. Among the pillars, two suggested ensuring that housing and building be reconstructed using disaster-resilient techniques at appropriate locations, away from flood plains and slopes. Secondly, for designing 'green buildings' to make Kerala a green state by deploying alternative construction technologies with low carbon footprints.

The fundamental problem with both Gadgil and Kasthurirangan reports is not the lack of environmental interest but its lack of cultural perspectives while dealing with the issue. The recommendation reports do not provide a holistic policy recommendation that delves into the ecology, biodiversity and human interaction. The current global concern about the state of the environment has led to a spectacular expansion of academic interest in environmental matters, which has affected society as well as physical sciences.

Chapterization

1.30 There are five chapters in this report. The current chapter is the introduction, in which the problem of the study, the literature review, the study objectives, and the conceptual frames are elaborately presented along with the methods and methodologies employed in the study. The second chapter in this report is titled An Ethnography of Muthuvan

Settlement Life, which provides a detailed ethnographic account of the Muthuvan community, their settlement life and provide the concept of housing in their culture. The third chapter, titled The Architecture of Muthuvan Settlment, gives detailed architectural aspects of the issues of housing among the Muthuvan community. The fourth chapter, titled The Evaluation of Existing Housing Scheme for the Muthuvan Community provides a critical evaluation of the existing housing policies and its impacts among the Muthuvan community. The final chapter, titled The Need for a Holisitic Housing Policy for a Sustainable Future, presents the demand for affirmative housing policy for the state in general and tribal communities in particular. Policy recommendations are presented through the insights collected in the study.

PDNA presented four-pillars areas as the frames to build Nava Kerala. The four pillars are 1) Integrated Water Resource Management (IWRM), 2) Eco-Sensitive and Risk-Informed Approaches to Land Use Settlement, 3) Inclusive and people-centered approaches, 4) Knowledge, Innovation and Technowledge. Among the pillars, two suggested ensuring that housing and building be reconstructed using disaster-resilient techniques at appropriate locations, away from flood plains and slopes.

A view from Edamalakkudy

A group of Muthuvan women working in the field. Photo taken by Furer-Haimendorf in 1952.
Source: SOAS Digital Archives.

Chapter Two

An Ethnography of Muthuvan Settlement Life

2.1 Muthuvan is a Scheduled Tribe who inhabit mainly on the mountain valleys of the Western Ghats in Idukki, Ernakulam, and Thrissur districts of Kerala and the adjacent areas of Coimbatore, Tiruppur and Theni districts of Tamil Nadu. The 2011 census of the Government of India had estimated that there are 23,746 Muthuvan people residing in the state of Kerala, among whom 11,931 are men, and 11,815 are women. Among the Muthuvan people living in Kerala, there are two sects, Eastern Muthuvan and the Western Muthuvan. The two sects differ culturally, socially and linguistically. Those residing closer to the state of Tamil Nadu on the eastern side of the Ghats are less assimilated into the culture of the mainstream communities; their Muthuvan dialect consists of more Tamil elements.

2.2 The Muthuvan people who inhabit the western side are relatively more assimilated into the culture and language of the mainstream Malayali community. While the Eastern Muthuvan speaks their own Muthuvan dialects, the influence of Malayalam language makes a difference in the dialects of Western Muthuvan people. Nonetheless, beyond the differences, both the Eastern and the Western Muthuvan have plenty in common. Traditionally, agriculture is the primary means of subsistence for Muthuvans. Hence, they are often referred to as hill cultivators in early literature. Among the Eastern Muthuvans, farming of traditional vegetables, fruits, and edible roots prevails. A majority of Muthuvans turned to cultivate cash crops a few decades ago itself.

2.3 The Muthuvan community has many unique social and cultural practices. The settlements of the Muthuvan people are called Kudi. The Muthuvan Kudi is mostly located in relatively isolated patches of mountains and forests on the eastern and western part of the Ghats of the aforesaid districts in Kerala and Tamil Nadu. In the olden days, Muthuvan Kudi was mobile in nature. The Kudi would shift from one patch of the forest to another every year. After the forest rules and related policies restricted the practices of shifting cultivation, they adopted settlements living. The traditional social systems, customs, culture, and unique habitat practices were shaped mainly by their occupation and their isolation from the rest of the world.

2.4 The Muthuvans, especially the Eastern Muthuvans, unlike any other Scheduled Tribal communities in Kerala, continue to maintain social isolation and their unique social practices thus, holding a unique position among the Scheduled Tribes in Kerala. Any attempt to diagnose the issues of existing policy interventions among the community could only be made possible through the understanding of the traditions of the community. Therefore, it is necessary to understand the way the interventions of tribal development policies, schemes and plans affect these people and their culture. This chapter will provide an ethnographic account of the traditional aspects of the social and cultural life of the Muthuvan community in Kerala with an emphasis on their housing practices.

Among the Muthuvan people living in Kerala, there are two sects, Eastern Muthuvan and the Western Muthuvan. The two sects differ culturally, socially and linguistically. Those residing closer to the state of Tamil Nadu on the eastern side of the Ghats are less assimilated into the culture of the mainstream communities, their Muthuvan dialect consists of more Tamil elements.

Map of Idukki district and adjesent areas where the Muthuvan people inhabit

The History of the Muthuvan People

2.5 The existing studies and the folklores of the community unanimously share the view that the Muthuvan community migrated from the plains of Madurai to the valleys of the Western Ghats, during the Chera Period, thus making them a non-indigenous tribe. The Western Muthuvan people dwell in

Adimali, Kiliparambu, Kanchiyar, Pooyamkutty, Thattekad, Kuttampuzha, and Anakulam, which were part of the Travancore until the formation of the State of Kerala in 1956. The Eastern Muthuvan inhibits Marayoor, Anamudi, Munnar, Devikulam,Chokkanad, Bodimettu, Poopara which was called the Anjunadu Valley. Among the Muthuvan community, those who inhabit the western side and those on the eastern side of the Ghats share a slightly different narrative on their migration to the Ghats from Madurai.

2.6 The Muthuvan people who live in the western part of the Western Ghats believe that 'Kannaki, on hearing the news of her husband's unfair execution, takes the form of Bhadrakali, the goddess of destruction, and avenged her husband's death by burning Madurai city down. Kannaki, then proceeded westward until she reached the land of the Malayalam speaking people, dominated the Chera King, and settled there under the name Santhalattu Bhagavati. Some of the people who escaped the fire followed Kannaki and settled in the Travancore forest (Thomas 1958:57). The Muthuvan people, who live on the eastern side of the Ghats, 'believe that they followed a Pandyan prince into the hills. When Kannaki burnt Madurai, the younger brother of the Pandian King escaped from the city and fled for safety to the Travancore hills' (Thomas 1958:58).

2.7 Thomas (1958:60) claims that the Muthuvan people believe that they are descendants of Vellalas, an agricultural Tamil caste. When they left Madurai, they carried the idol of goddess Meenakshi on their Muthuvu (back) and hence came to be called Muthuvan - he who carries things on his back. Some Muthuvans narrate how they carried their children and belongings on their backs during their exodus from Madurai, insisting that thus they came to be known as Muthuvan. The Muthuvans, especially the women continue to carry children on their shoulders. The story of migration and the worship of goddess Madurai Meenakshi continue to prevail among the Muthuvans. However, the Muthuvan community does not attempt to claim any contemporary connection with the region of Madurai. After beginning life atop the Western Ghats, they have been observing a relatively isolated social life. For centuries they kept shifting their settlements until the forest policies restricted their free movement through the forest.

2.8The Muthuvan in old days, considered the entire forestland as their own and each year moved to different parts of the forest to cultivate various crops leading a self-sustained life. Early studies mention that the Muthuvan community began living in permanent settlements during the first part of the twentieth century. The Muthuvans who started leading a settled collective life grew closer to mainstream communities and cities, and those who maintained relative isolation continued to retain their unique culture. The social changes and cultural transformation that developed gradually reflected differently among the two sects.

The Land, the Plants and the Animals

2.9 In Idukki, the hills, the valleys and the forest where the Muthuvan community has been living is abundant with natural resources. 'The Muthuvan region lies 3,000 to 9000 feet above sea level, but there is no settlement at altitudes this high. Most of the settlements are within the altitude of 3,000 and 6,500 feet, but there are a few on western slopes at lower attitudes. The high mountain range lies on the eastern borders of the state, with a steady rise from south to north and west to east, so that the highest elevations are reached in the north western region. The possibilities of vegetation also change with rising altitude. The entire region, with the exception of clearing for tea estates and colonization, is thickly wooded with deciduous forests at the higher places, and wild, evergreen forests at a lower elevation' (Thomas 1958: 74). The region is rich in water sources and has several streams and rivers.The major rivers in the region are Periyar, Thodupuzhayar, Muthirapuzha, and Thalayar and Mullayar, Cheruthoni, Perinjankutti, Idamalayar, Muthayar, Perunthuraiar, Chinnar, Cheruthoni, Kattapanayar, and Thalayar are the tributaries of these rivers that flourishes in the lush evergreen forests in the region.
2.10 Thomas PT (1958:70-71) writes; 'The total extent of the area within which the Muthuvan settlements are situated is approximately 760 square miles. About one-third of this region is under tea, cardamom and

rice cultivation. Chief among these is tea, which has been organized agricultural industry on the estate system since the 1860s'. Munnar is the main city in the region, where the educational institutions, hospitals, markets and other government offices are situated. Marayoor, Kanthaloor, Koviloor, Angamali, and other small towns are also located near various hamlets of the Muthuvan community. Here also, there are markets, banks, and other institutions, but residents in the Idamalakkudi, Marayoor, Soorianelly and Vattavada area have to travel more than 100 kilometers to access the nearest Government Medical College in Kottayam.

A traditional Muthuvan Kudi. Photo taken by Furer Haimendorf in 1952. Source: SOAS Digital Archives

2.11 The climate in this area is cold during most times of the year; in winter, the temperature would come down to minus degrees Celsius during the night, but generally, it stays between 35 degre and 15 degree Celsius. The forest in this region is one of the richest tropical moist forests in the country where teak, rosewood, ebony, wild jack, jackwood, champaca, Indian keno tree, Indian laurel, white cedar, red cedar, various bamboo species, vantak abundantly grows. The soil and the climate in this area are conducive for plantations of spices such as pepper, cardamom, ginger, cinnamon, etc.

2.12 Indian elephant, bison, tiger, panther, gaur, sambar, giant squirrel, spotted deer, langur, and monkeys can be found in the region where Muthuvans inhabit. Among these animals, elephants and bison are a major threat to the crops and plantations of the Muthuvan community. At the same time, the Muthuvan community has managed to maintain a symbiotic relationship with the animal and plant species that cohabit in this region.

The Social and Cultural Life of the Muthuvan Community

2.13 The life and culture of the Muthuvan community are significant not only to anthropologists and ethnographers, but also to policymakers in the fields of agriculture, farming, sustainable and green architecture, law, ecology and so on. The relatively isolated life of the Muthuvan community on the hilltops of Western Ghats, their traditional knowledge of agriculture and architecture, their forms of social control system and customs are worth exploring for two major reasons. First, their unique tradition and culture are to be understood in depth for providing development schemes or policies of benefit to the community. Second, the knowledge and wisdom that the Muthuvan community has been carrying forward through their generations need to be recorded in order to draft inclusive and sustainable policies. Their organizational system, social control and sustainable agricultural practices, dormitory system and the art of building sustainable

mud houses that they pass through generations are significant components of the life and culture of the Muthuvan community.

2.14 The Muthuvan community lives in small isolated settlements called Kudi. The Kudi forms the basic unit of the social collective and political organization of the Muthuvan community. Traditionally, the Muthuvan life is bound by the defined routine activities around the Kudi. A Kudi for the Muthuvan community is a system where a number of households live with strong bondage between families and individuals. In the olden days, while they practiced shifting cultivation from one location to another, the Muthuvan Kudi was a mobile unit; they would regularly shift the Kudi from one place to another in search of fertile ground for cultivation, the primary means of their livelihood.

2.15 The private ownership of land did not exist among the Muthuvans earlier. Their social life consisted of several elements that were collectively owned; however, once they started having permanent settlements, they started managing the cultivation in and around their Kudi, and the suden transition give way to individual property and such.

2.16 In the present day, it is estimated that there are 108 Muthuvan Kudi in the state of Kerala, scattered across the hills and forests of the three districts of the state. During the late 18th century, some of the traditional Muthuvan Kudi was subjected to relocation due to the construction of dams in the area. Most of the Muthuvan Kudis are surrounded by an abundance of natural resources and evergreen forests. There is very little social relationship between the Muthuvan community and other communities in proximity. Traditionally, Kudi is considered to be a self-sufficient unit, hence social relationships with people outside were not required for them under normal circumstances.

2.17 A typical Muthuvan Kudi consists of 50 to 60 houses on an average. Bigger Kudi consisting of more than 150 houses and smaller Kudi with less than 10 houses also exists. Apart from the houses, the essential components of the Muthuvan Kudi are Chavadi - the male dormitory, a Kulipura also called Thinna Veed- the female dormitory, guardhouses, storehouses and a temple.

2.18 Traditionally Muthuvans have small houses with only two rooms. The houses in the Kudi are scattered along the sloped surface of the hill. The Muthuvans construct their own houses and the skills and knowledge behind the construction of the mud houses are passed on from generation to generation.

The walls of the mud houses are constructed using bamboo, mud, and stones. Wild straw is used to make the roof. However, in recent times metal sheets are being used for roofing. Since the houses are located on the slope of the hills, heavy winds are the greatest threat to their houses. During windy season, they construct a windshield with bamboo and wild leaves around their houses and other mud buildings for protection. The Muthuvan community was self-sufficient to meet their housing requirements until the forest department restricted the collection of raw materials required for construction.

2.19 The social and cultural aspects of the Muthuvan community can be understood by observing their housing practices. The concept of housing for the Muthuvan community is different from mainstream notions of housing. For them, only a married couple needs a house for themselves. Unmarried people merely need some space to eat in and to store their clothes and other materials. A Muthuvan can eat from any house in the Kudi. The community, hence have different prospects, sentiment, and culture associated with housing, which is different from the dominant mainstream notion of houses in nuclear families. In the two rooms of a house in a Kudi, one room is used as a bedroom and the other is used as a kitchen, both these places are maintained clean. Both the rooms are also used to store their collection of seeds. Storage of seeds is one of the primary functions of a house in the Kudi.

The Muthuvan Chavadi

2.20 The Chavadi - the male dormitory holds a distinctive role in shaping the life and culture of the Muthuvan people. The Chavadi is a single large hall, traditionally constructed with mud walls and a straw roof with a fire-pit in the centre of the hall. Chandran Kani of Thazhannam Kudi, located inside Chinnar Wildlife Sanctuary, 20kms from the nearest Marayoor township, remembers his experience of the Chavadi; “inside the Chavadi, it was warm during winters and cold during summers. From dusk until dawn we light a fire in the pit and sleep in its warmth. To sleep as smoke-filled up inside the Chavadi was a different

experience. Some Kudis still have traditional Chavadi." As per his suggesion we visit the Kudi. The Thazhannam Kudi, located on the eastern side of the Western Ghats, close to Pollachi district in Tamil Nadu, is one such settlement. Here, people continue to value the age-old traditions and customs. They cultivate indigenous varieties of paddy, ragi, beans, and other vegetables. However, the architeture of the Kudi has been subjected for suden transformation from its simple and sustainable, climate adapting residents to vulnearable and ecologically destructive houses which are strongly embedded in the psyche of the people across differences, the RCC houses, which also implemented not properly and well-designed

Source: http://iseeebirds.blogspot.com/

A traditional Muthuvan Chavadi. The roof has been changed to tinsheet.

manner. The Reinforced Cement Concrete (RCC) constructions in the Thazhannam Kudi barely meet the needs of its intended residents. The Chavadi in Thazhannam Kudi is an RCC building with a modern outlook. A Government agency reconstructed the old Chavadi ten years ago. The people in Thazhannam Kudi and other Kudis nearby have opposing views about this modern structure. Generally, the locals hold the traditional architecture in high regard, but

they are also having a liking for the modern transformation. People find the RCC model more conducive in their changing scenario, especially in the face of scarcity of resources, the lower preference among the new generations for their traditional ways, and the restrictions over collecting forest resources.

2.21 However, the social practice of the Chavadi system continues actively among the Muthuvan community, especially among those who inhabit the eastern side of the Ghats. In most Kudis, the Chavadi is located on the top portion of the Kudi, providing a wider view of the Kudi from the front yard of the Chavadi.

The view of newly constructed Chavady(in the back) and the community hall(in the front) in Thayannam Kudi

However, this is not a general rule for the Chavadi. Due to the expansion of the Kudi, especially with the addition of houses provided by various agencies, the Chavadi could also be located towards the lower or middle portion of the Kudi. Muthuvans living in the Chavadi wake up early, around five in the morning, and leave to begin with their daily routine. The Chavadi is usually active between six to seven in the evening when men across age groups meet in its front yard after engaging in farming activities. Both Muthuvan men and women are diligent; they work in their field from dawn to dusk.

2.22 The men in the Kudi spend most of their free time in the Chavadi. At night, the unmarried men and the old men of the Kudi sleep together in the Chavadi. Married men leave the Chavadi for dinner and do not return. The Chavadi is the space where most of the social, cultural, and political activities of the Kudi take place. The Chavadi is active from late afternoon; men across age groups engage in various activities in the Chavadi.

2.23 The boys in the Kudi are usually "sent to the Chavadi once they start walking, or at the age of four or five" divulged Chandran from Thazhannam Kudi. When they are grown enough to walk without assistance, they reach the Chavadi, where they mingle with other kids of their age and form friendships. The children
in the Chavadi is called Altharikal, they have certain duties to perform to ensure the smooth running of the Chavadi. In the evening, the Altharikal has a distinctive duty to perform for the Chavadi; they are entrusted with the task of collecting firewood for burning during the night, they are also responsible for minor cleaning and maintenance work at the Chavadi. 'The duties and responsibilities of the members in Chavedi are well captured in (Kumar 2005).

2.24 The children are free from other livelihood related works. The older people and the children have only two meals a day. After breakfast, the children in the Kudi go to the riverside and spend time having fun and playing games. They come back to the Kudi in the late afternoon and go to the Chavadi after dinner. Most of the daily activities including playing during the day and having dinner in the evening are done collectively. Among the Muthuvans, people start practicing collective dining at an early age. An individual in the Kudi can have their meals from any house in the Kudi, this practice continues even today in most traditional Muthuvan Kudi.

2.25 The young men in the Kudi also go for cultivation and other activities during the day and come back to the Kudi in the afternoon, after which they take bath and wash their clothes in the nearby river or stream. Until evening, the young folks in the Kudi spend time near the river or stream. Most of them have been using the same piece of clothing for a long time, which they wash and put out for drying while taking a bath. They continue swimming or lie down somewhere until the washed clothes are dried.

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After having dinner, they come back to the Chavadi on usual days, some of them would go to the field to guard their crops against wild animals. Since the Muthuvans cultivate their crops inside the forests or in the fringes of the forest the attack on crops by wild animals are frequent, especially during the night. To prevent this attack, the Muthuvans act as security for their agricultural land. Men, both old and young take turns to watch over the field during the night, they use indigenous techniques to identify the arrival and movement of animals.

2.26 By late afternoon, most of the older men in the Kudi reach the Chavadi after their bath. They spend a considerable amount of time in the front yard of the Chavadi, engaging in conversation on their internal matters, issues of neighbouring Kudis, cultivation plans and so on. They also watch over the kids and give them directions on the activities in the Chavadi. By early evening, around seven o'clock or even earlier, all of them leave for their houses for dinner. Post dinner, those who sleep at Chavadi come back to the Chavadi and lay their mat in the designated space and prepare for sleep. Men across age groups sleep together under one roof, following a strict value system and maintaining respect for elders, ensuring peace in the Chavadi.

2.27 The traditional Chavadi, constructed by the community still exists and the practices surrounding it continue to be active in most Kudis among the Eastern Muthuvan. The Periya Kudi, Shedu Kudi, and Company Kudi, among a few others have the traditional Chavadi, whereas in the western side Chavadi and other social and cultural institutions are facing a decline as they are in proximity to urban spaces. The construction of Chavadi is subjected to changes; the scarcity of straw used for roofing has led to the use of tin sheets, and RCC hall is replasing as Chavadi recently. Most of the traditional Chavadi is quite old. The locals shared that the Chavadi constructed in the traditional way will last for more than forty years and would only require occasional retouching of the wall and a new straw roof once in a while.

2.28 The Muthuvan people often visit their neighboring Kudi to meet their relatives and friends, and for various other purposes.The inter Kudi

visit is a part of their rituals associated with birth, marriage, and death. The male visitors in the Kudi stay in the Chavadi during the time of their visit. Muthuvan people are open to accommodating visitors and guests in the Chavadi. The Chavadi holds importance as the place where important social gatherings and political meetings take place.

The Kulipura of Muthuvan Community

2.29 Similar to the Chavadi, there exists a dormitory system for women also. The women's dormitory in the Muthuvan community is called Kulipura or Thinnai Veedu. However, there are functional differences between the Kulipura and the Chavadi. 'Towards the edges of the Kudi, there would be a couple of secluded sheds called Muttujudichi or Valamappura or the Kuliveed. Menstruating women come to live here in confinement. The Muthuvans construct the Kuliveedu as far away from their dwelling as possible, facing away from the rest of the houses. 'Women in their pollution periods, including confinements, live in this shed out of sight of the men' (Thomas 1962:152). In some larger Kudi, there can be multiple Kulipura. The young men in the Kudi construct the Kulipura as the older folks tend to maintain a distance from anything associated with the Kulipura. It is often built in the isolated downward part of the sloped terrain of the Kudi. Only menstruating women, pregnant women, and female visitors are allowed inside the Kulipura.

2.30Among the Muthuvan community, there are restrictions on the interaction and relationship between men and women. Men and women avoid meeting each other in the Kudi, both have separate places for spending their leisure time in the Kudi. The men meet each other and spend most of their time in and around the Chavadi, whereas women gather near the lower side of the Kudi. The Muthuvan women also engage in hard labor in thecultivation field and do the cooking and household chores. The Kulipura does not hold the same importance as the Chavadi in a Kudi. The Muthuvan women are generally reluctant to spend time in the Kulipura. Most of them visit the Kulipura to oblige by the social norm that prevails in the community. Menstruating women and pregnant women are expected not to reside in their house or be seen in public.

2.31 The Kulipura in most Kudi does not follow its traditional architecture. In the last twenty years, Kulipura in several Kudis has been replaced by RCC buildings. The cultural boundaries that exist among the Muthuvan community in terms of the relationship between men and women have contributed to the negative perceptions and attitudes on the Kulipura. Both traditional and modern RCC Kulipura in the Muthuvan Kudi seems unfulfilling of the basic requirements of women during their stay in the Kulipura. The cultural constraints of gender relations strongly shape and restrict men's engagement with anything related to the Kulipura.

The view of government provided Kulippura in Thazhannamkudi

2.32 The community is reluctant to show the Kulipura to outsiders, especially men. The female architect in our research team had paid special attention to the Kulipura in all the settlement visited. She observed that unlike the Chavadi, the Kulipura in most settlements is not well maintained.

The Kulipura is less conducive for comfortable living; there is also a shortage of sufficient ventilation. The Kulipura constructed by Government agencies has two rooms, a kitchen, and an attached washroom. Until recently, most of the childbirths in the Kudi also took place in the Kulipura. Among the Muthuvan community, there exist midwives who are experts in taking care of pregnant women and delivery using traditional methods.

The Guardhouse

A Tree House in Muthuvan field. Photo by Fürer-Haimendorf in 1952. SOAS Digital Archive

2.33 Since the Muthuvan people cultivate in the forest, the protection of crops from wild animals is an important and inevitable task for its residents . Thomas (1962:94) writes;.'between sowing and harvesting, the Muthuvan are perpetually worried about the disastrous nocturnal visits of elephants and bison

to the cultivation site. Three or four men go into the field every night to keep a watch. The worst enemy of the crops is the elephant; they come around frequently, and is not easily frightened'. The Muthuvan people are vigilant about the attack of wild animals and keep a watch over the field from a guardhouse constructed near the field. The guardhouses are constructed in strategic spots and are called Kermadam. In the olden days, the guard houses were built on top of trees. However, after the Kudi and the cultivation of land became settlements, they began constructing guardhouses on land using bamboo and leaves. In some Kudis, people construct mud houses with a single room to serve the purpose of a guardroom. The Muthuvans remarked that the guardhouses they construct last up to three or more seasons and if it is a mud house, it will last even longer.

The Storeroom

2.34 Post cultivation, the Muthuvans do not take the grains home immediately. Instead, they store the grains near the field for drying and other processes. A storeroom is constructed near the field to stock the grains. Earlier, "the stock house were large platforms of split bamboo or jungle wood with poles inside, built at a height of three to four feet from the ground. The harvest of each household is segregated on the platform where it remains until it dries. If it is too damp, a fire put underneath the platform to speed up the drying" (Thomas 1962: 94-95). The use of the storeroom seems ideal as they would not have sufficient space in their houses to store the grains. For the Muthuvan community, life is not confined to the activities in the house, rather is bound by the cultivation activities and the collective life in the Kudi.

The Temple

2.35 The temple which Muthuvan people call Kovil in Tamil is an integral part of the Kudi. 'The temple in the Kudi is distinguished from

the other huts by its location and the tidiness of its surroundings. Otherwise, it looks very much like any other hut. The temple is constructed a few yards away from their dwelling and farthest from the Kulipura. It is generally positioned on a prominent mound at the entrance to the Kudi and is always in a good state (Thomas 1962: 152)'. The temple in Muthuvan Kudi has also been subjected to drastic transformation in recent years. Except for some isolated Kudi where the traditional construction of temples exists, in most other Kudi the temple has been modified or reconstructed in the RCC model.

The Gender Constructions of Muthuvan Community

A Tradetional Temple in Muthuvan Kudi. Photo by: Fürer-Haimendorf in 1952. SOAS Digital Archives

2.36 It is observed that among the Muthuvan community, the relation between men and women is not as liberal as it is among most other tribal communities in Kerala. There exist strict norms

and rules based on the shared values and morals of the community that restrict interaction between men and women in the Kudi. The Muthuvan Kudis that follow these traditions continues to uphold the traditional gendered boundaries in their everyday life. For example, in Thayannam Kudi women are reluctant to even appear before the men in their Kudi and women shy away from interacting with strangers. In contrast to this, in Kudi located closer to rural areas or cities, the women play a potential role in the Kudi, which is almost similar to the men.

View of traditional kuliveedu in Kuthukallukudi

2.37 In the traditional Kudi, where the gender constraints prevail, it is observed that the existing gender constructs adversely affect women's health conditions. During our fieldwork in the Kudi in the eastern side, where the community upholds these boundaries in gender relationships, social system and cultural practices, and the system of Kulipura, acts concerning the Kulipura are carried out against the will of the women. For example, in most of the Kudi on the eastern side, the consumption of pills that extend the duration of menstruation is very common. Women respondents in these Kudis revealed that they use pills to extend the duration of their menstruation and to avoid pregnancy.

2.38 The Kulipura in Muthuvan Kudi is not favorable for an easy and healthy stay for the Muthuvan women. Muthuvan women stay here throughout their menstruation. In 'the late pregnancy and delivery time the women need to stay there for a longer period, which is around 21 days. Most of the childbirths in the Muthuvan community continue to take place in the Kudi' (Srinisha and Parameswaran 2019). The frequent use of pills has become a major reason for complex health issues among the Muthuvan people. Medical experts noted that they lack proper education and awareness regarding the use of pills thus leading to severe health issues.

2.39 In some Kudi, the Government agencies have provided modern concrete Kulipura with sufficient ventilation, spacious rooms, modern toilets, and a kitchen, but this is only in few Kudi. The cultural construction of the Kulipura makes people reluctant to use the Kulipura and its facilities. In some Kudi, it is also observed that people abandon modern Kulipura and stick to their traditional Kulipura.

View of a Muthuvan Kudi, in Edamalakudi

Chapter Three

The Architecture of the Muthuvan Settlement

3.1 The Muthuvan community has been maintaining their traditional ways of life in their relatively isolated settlements in the valleys of Western Ghats. The second chapter traces their journey from the period of their arrival to these valleys to the present. The community possesses several indigenous knowledge and this includes the construction techniques of their settlements known as Kudi. Their settlement is encompassed of elements such as houses, dormitories, temple, and watch sheds. The roots of the architecture of their settlements and the elements within it are rather obscure. Their social system, culture and farming practices could have possibly shaped this set of knowledge. The techniques of construction they have been using to build the settlement when juxtaposed with the existing housing policies helps understand the flaws involved in the latter.

3.2 The unique housing traditions and architectural practices have begun to disappear from the community in a certain short period. It is observed that the implementation of various government housing schemes in the last couple of decades have brought about a drastic shift in the architecture of the Muthuvan settlements. The typical Muthuvan settlement consists of eco- friendly, climate-adaptive mud houses and other elements constructed with sustainable means, which are now rapidly transforming into concrete jungles. Muthuvan people are at the same time comfortable and concerned about the government housing schemes, which in fact has failed to address their cultural and social requirements.

3.3This chapter looks into the complex architectural traditions of the Muthuvan community and its transformation in the light of the various housing schemes introduced by the Government. The unscientific implementation of housing policies among the tribal communities is disrupting the traditional sustainable architecture of many tribal communities. This chapter intends to present a detailed account of the unique architecture of the Muthuvan community, which has been subjected to the negative impacts of the existing housing policies and schemes.

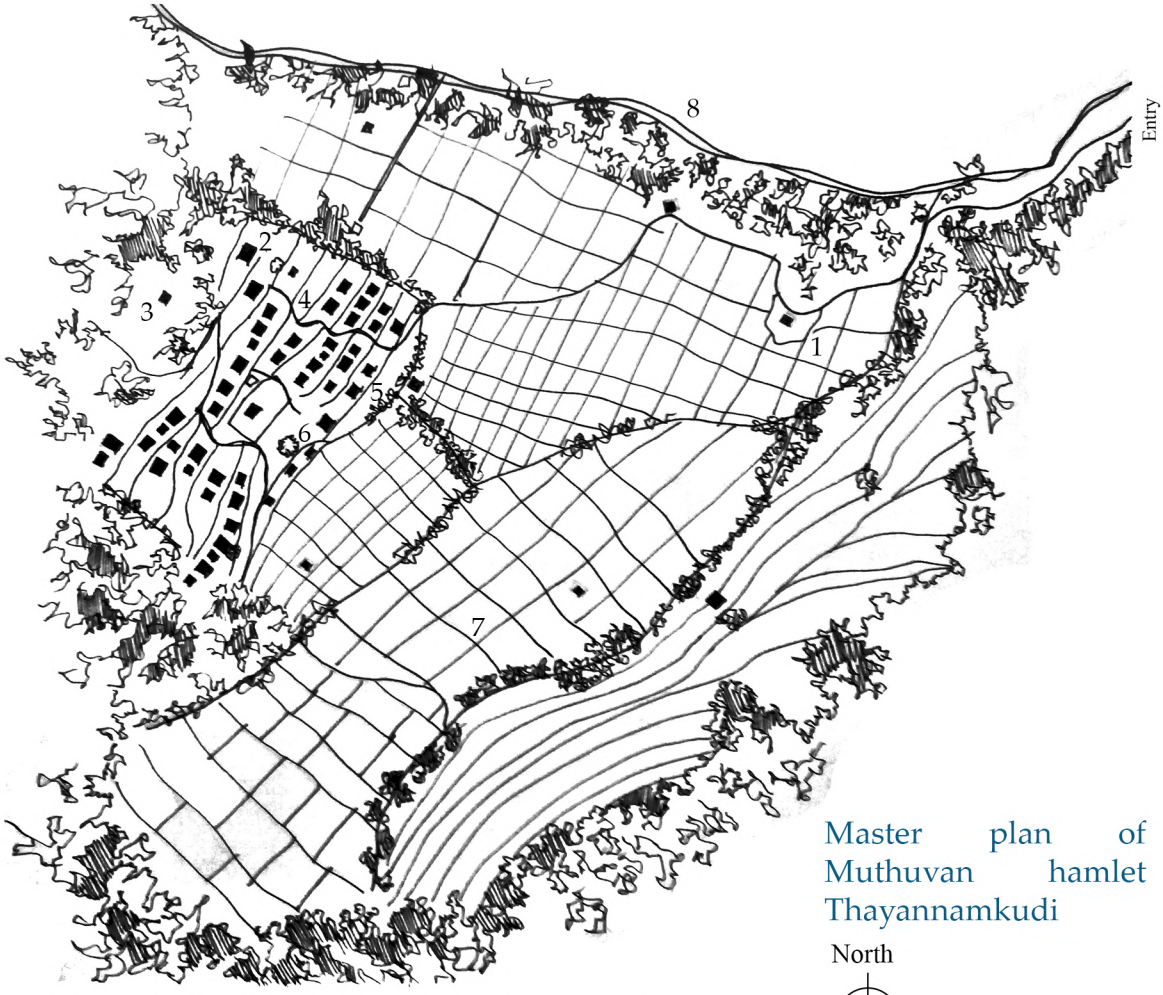
The Muthuvan Settlement Patterns

The community possesses several indigenous knowledge and this includes the construction techniques of their settlements known as Kudi. Their settlement is encompassed of elements such as houses, dormitories, temple, and watchtower.

3.4 Muthuvan settlements are seen in clustered, linear, polygonal and irregular cluster patterns. Houses are aligned according to the contours of the site. As mentioned, the temple in most of the typical Muthuvan hamlets is located at the topmost level of the site. The Chavadi, the dormitory for men is located at the top level of the settlement. Houses and activities of the community can be seen from the stream.

Kuliveedu the dormitory for menstruating women is located in the lowest level of contours. Kuliveedu is the well-buffered zone from the housing clusters. Space for cattle is provided in one portion of the hamlet and Kaval veedu a single dwelling placed in agriculture lands where guard stays at night to watch are located near the farm.

3.5 The settlement patterns of the Muthuvan community have a greater role in shaping the social bondages of the individuals in the community. The Muthuvan houses are smaller atterns.



Master plan of Muthuvan hamlet Thayannamkudi

North

Entrance path way
1 Kavalveedu
2 Sathram
3 Temple
4 Houses
5 Cattle shed
6 Kuliveed
7 Agriculture lands
8 Waterbody

units used for cooking, eating, and sleeping purposes. The chanting, singing, small games and dancing are their community activities. These activities take place in courtyards in between by houses. Most of the Muthuvan settlements are arranged in contours creating irregular clustered patterns.Women in the settlement spend their evening in courtyards. Women collect water, firewood, washbasins, baths, and washcloths collectively. They collect wood for cooking purposes from the forest and arrange and store it around trees in courtyards.

It is also observed that there is no boundary wall in between the houses in the settlement.There are free-flowing spaces between houses, and these spaces act as a public realm where the major routine social activities of the community take place.

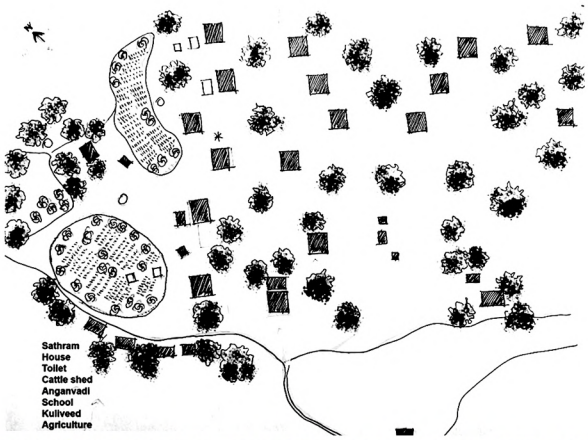
3.6 There is a drastic change in the pattern of settlements these days. In majority of the Muthuvan settlements now the concrete houses built next to their old traditional houses. The new concrete houses are different in size, volume, and construction. These houses take most of the courtyard spaces of the settlement.

Sketch of Muthuvan hamlet Mulankamutty kudi

Clustered patterns sharing courtyards became congested irregular clusters with small or no spaces in between. This resulted in shifting social gathering activities of the courtyard inside the house. In the traditional Muthuvan society the courtyards were very important (See figure 2) spaces of interaction and now the house is becoming more important.

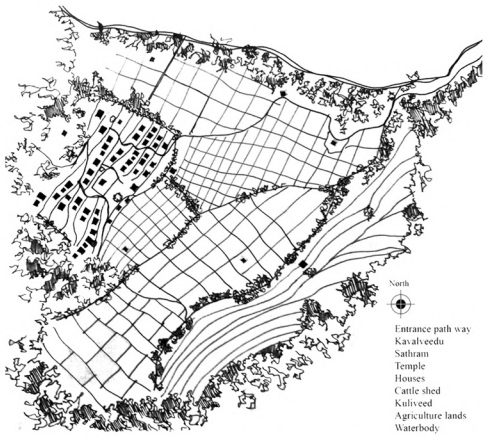
Settlement Pattern

The settlement pattern of selected hamlets for field study are given below.



Mulankamutty kudi, Chinnar

Traditional Muthuvan Hamlet
Cluster pattern creating courtyard spaces
Spatial arrangements
Flat topography
Organicaly formed spaces
Follows Traditional Mud house construction
Depends on Agriculture
Follows dormitory system and tradition



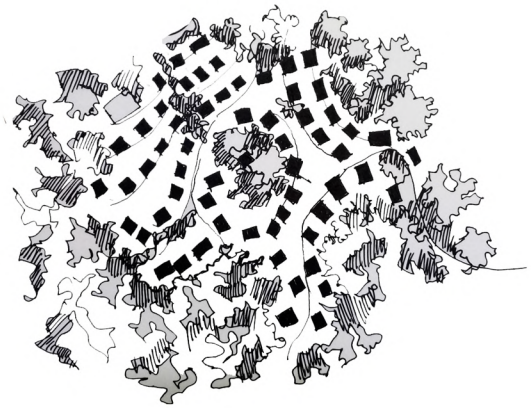
Thayannam Kudi, Chinnar

Modernised Muthuvan Hamlet
Cluster pattern
Contour topography
Houses are linearly arranged in contours
No proper spatial planning
Mix of both Mud houses and concrete houses
Depends on agriculture
Follows dormitory system and tradition

Characteristics of Settlement

Kulachuvayal kudi, Kanthalloor

Modernised Muthuvan Hamlet
Congested Cluster pattern
No proper spatial planning
Flat topography
Mix of both Mud houses and concrete houses
Depends on Agriculture
Follows dormitory system and tradition



Sheddu Kudi, Idamalakudi
Cluster pattern
Shared courtyards
Contour topography
Houses are arranged without disturbing the natural contours
Mix of both Mud houses and concrete houses
Wind shields are attached to houses for preventing heavy wind
Agriculture centered settlement pattern
Not every hamlet in Idamalakudy posess dormitory system.
Shedukudi possess traditional sathram and thinnaveedu

Characteristics of Settlement

Koodallarkudi, Vattavada

Modernised Muthuvan Hamlet
Houses are arranged linearly in contours
Mix of both Mud houses and concrete houses
Agriculture centric community living
Follows dormitory system and tradition

Chempakathozhukudi, Chinnakanal

Ruralised Muthuvan hamlet
Contour topography
Congested Cluster pattern
No proper spatial planning
Mix of both Mud houses and concrete houses
Follows dormitory system and tradition

Sketch of Muthuvan hamlet Mulankamutty kudi

Built Elements of Muthuvan Settlement

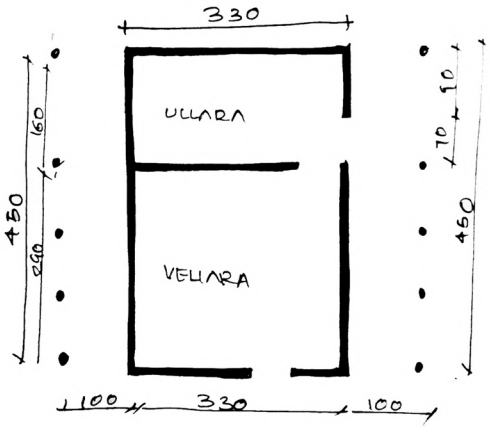
3.7 As mentioned in the previous chapter the Muthuvan settlement is encompassed with a number of built elements, that include houses, Chavadi- the dormitory for men, Kulipura- the dormitory for menstruated women, temple, Kaval Veedu, and guardhouses. . In the following pages, we will depict the asthetics of architecture and spacial utilizations within the Muthuvan settlements.

House

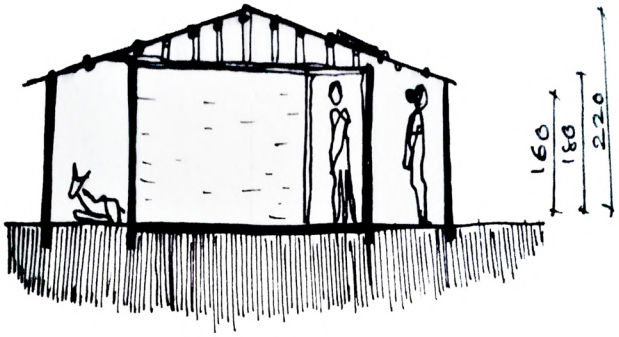
3.8 The traditional mud house of the Muthuvan community is a small structure which consist of two rooms and total area 150 Sq Ft. apprx. One room they utilize for sleeping, eating and storing seeds and the other room will be the kitchen. The multipurpose room has no furniture, shelves installed but they have small rise made of mud for keeping seeds and other things. Sleeping sheets are stored at the rafters of the roof and clothes are hanged on ropes.

Sketch of Traditional Muthuvan house Mulankamutty kudi

Schematic section of Muthuvan kudi, Thayannam kudi



Schematic Plan

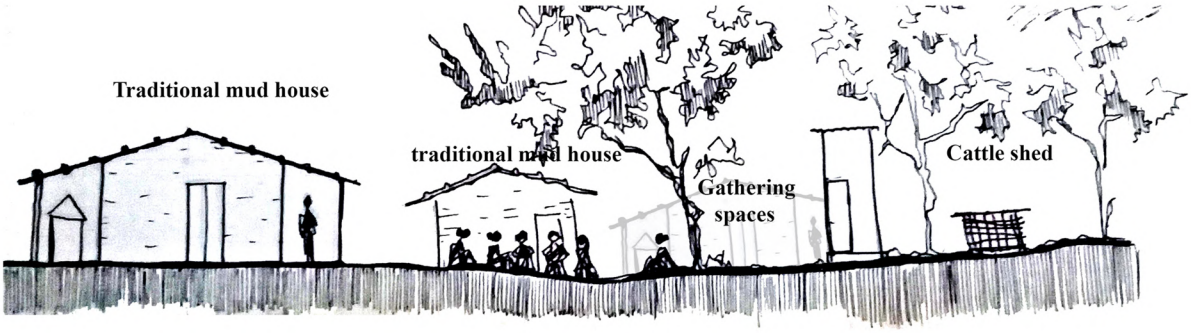


Schematic Section

Schematic plan and section of Traditional Muthuvan house Mulankamutty kudi

This multipurpose hall is called Veli ara and the kitchen is called Ullara. Only couples and kids sleep in the house and all others spend their time from evening at Chavadi and Kuliveedu. However, after the Govt. intervention of housing schemes are began implemented among the Muthuvan communities, the settlement pattern and the architecture of the Kudi has been subjected to drastic transformations. Now, there are only a few settlements exist with full of traditional houses and other built elements. Majority of the Muthuvan settlements have houses with diverse designs and different types of roofs at present.

Schematic section of Traditional Muthuvan Hamlet, Mulankamutty kudi



Mulankamutti kudi
Muthuvan settlement

Muthuvan House Typology

Traditional Muthuvan houses built of mud were efficient in terms of spacial configuration. There are tremendous changes happened in the house construction. Their hand made mud houses are replaced by concrete houses of different schemes. The shift in construction method caused discomfort in the interior.Even though the spacial configuration is different in the typologies the usage pattern is still the same.

There are different types of houses in muthuvan settlements including their traditional houses. These are categorised as different house typologies. There we can see the cultural shifts and similarities in each typology.

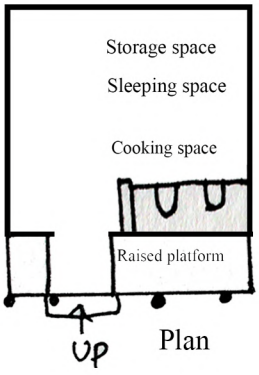
Housing Typology One

Spatial configuration

3.9 Traditional mud single hall dwelling comprises of cooking and sleeping spaces. This single dwelling is about 120 square feet area. Its spatial efficiency is to be noted. Single hall is used for sleeping, eating, working, and cooking purposes. A small veranda which is raised 3' is used as sit out. Cooking space is arranged at the corner of the hall and kitchen utensils are kept on a rack hung above the hearth. Clothes are hung in a rope on the wall. Sleeping mat and things are kept in corners of the hall keeping the central portion of the hall empty. They cook food and eat together in the hall and use the same space for sleeping purpose. This single hall dwelling is used by small families. Parents and kids sleep inside the house and sons go to Chavadi for sleeping. Now a day this typology became rare. Only old age people make this typology near their new concrete houses.

Kulachuvayal
Area-120 Sq.ft
Space efficiency
Thermal comfort
Mud house with thatch roof
Single dwelling
Multipurpose hall comprising cooking spaceand sleeping space
Small verandah with raised platform for sitting

Details of Muthuvan house typology one



Ventilation

3.10 The house has one door at the entrance and a small opening at the cooking area for the smoke to vent. The heat from the hearth emanates through the floor and creates thermal comfort and the smoke helps to improve the strength of the thatch roof.

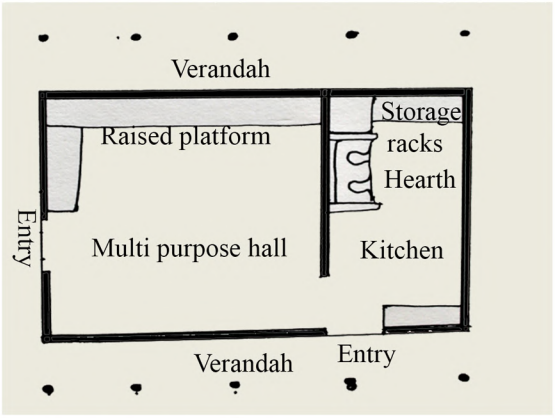
Building envelope material

3.11 Thermal comfort of this mud house is exceptional. Wattle and daub walls, earthen flooring, and thatch roofing creates thermal comfort inside the house. Thatch acts as a natural insulator and insulates the house in both cold and warm weather. Biggest disadvantages of thatch roof were its maintenance, availability and flammability. Wattle and daub wall also act as a thermal insulator. Only disadvantage of wattle and daub wall is thermites attack. Treated bamboos can be used for frame work to prevent termites attack. Mud flooring with cow dung final coat improves thermal comfort and air quality. Continuous maintenance is required for traditional mud houses. It was also a major activity of the community .

Housing Typology Two

Spatial configuration

3.12 This dwelling comprises of one multifunctional hall and a kitchen. This two-hall dwelling is about 250 Sq Ft area. They sleep, eat, sit and store things in the hall and cook food in kitchen. The size of the hall and kitchen is larger than the traditional Muthuvan mud houses. They made the same kind of mud platforms as in typology one, and racks for keeping things inside the hall. Storage in the corners of hall, keeping central space clean and empty all the time. Clothes are hung in rope on wall. The usage pattern is the same as they do it before.



Plan

There is no separate space for storing grains and agricultural equipment inside house. Kitchen is well maintained and hearth is made on the floor and raised platforms for keeping kitchen utensils are built attached to it. A wide rack made up of bamboo sticks are built above the hearth. There is no chimney to vent the smoke out. The smoke from the hearth fills kitchen and hall and makes discomfort at times. The interior walls and floor is plastered in mud and cow dung. They make their traditional interior in concrete house. No matter what type of modern construction and spatial arrangements we provide they use it in their own way.

Mulankamutty kudi
Area-150 Sq.ft
Mud house with sheet roof
2rooms dwelling
-Hall and kitchen
Thermal comfort less than thatch house

Figure 14 details of Muthuvan house typology two

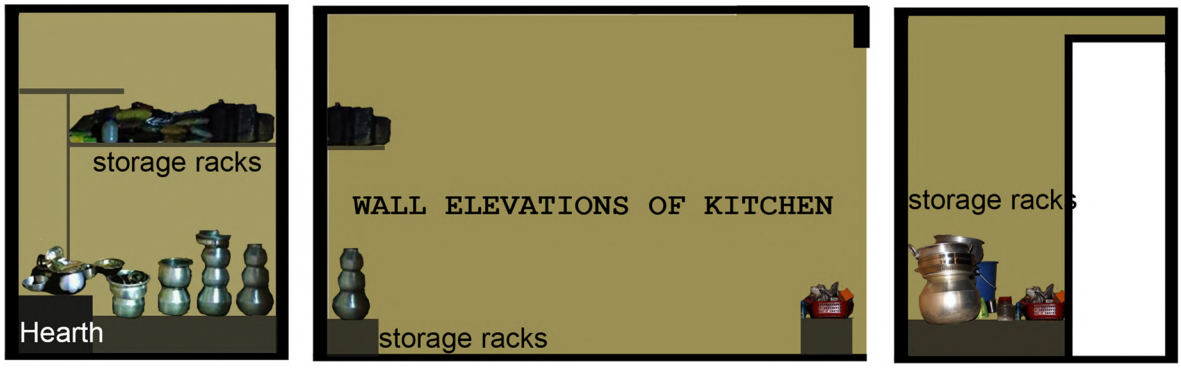
Ventilation

3.13 There are 2 doors and 2 windows for ventilation; one door is at the entrance and the second one from the kitchen. As there is no proper air circulation through the house it resulted in rising the temperature inside the house, at times.

Building envelope material

3.14 Walls are made up of hollow bricks and cement mortar. The floor and interior walls are plastered using mud and cow dung. Cow dung and mud mixture make interior cooler. The community lack the skill of building concrete houses and the building materials needed for the construction is not readily available. They do mud and cow dung plastering for the interior because it is readily available and they know the skills. This also creates discomfort to the inhabitants. This houses with asbestos sheet roof are not suitable for high windy and vulnerable areas.

Figure 15 details of Muthuvan house typology two



Housing Typology Three

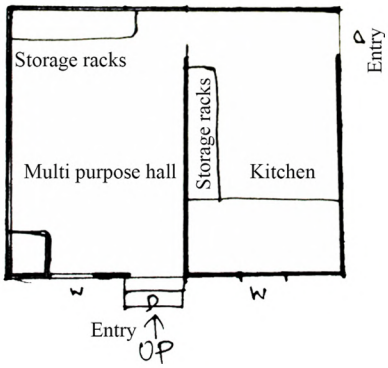
Spatial configuration

3.15 This dwelling comprises of a veranda, hall, room and a kitchen. The veranda is used for sitting, storing firewood and drying cloths. The hall is used for eating, sleeping, spending time together and other activities. A raised platform is built in the hall for

keeping things and a rack is fixed in the wall for keeping deities and used as pray area. The room for sleeping is used as storage space where they store grains, seeds and other agricultural equipment. Kitchen is built like their traditional kitchen. The interior of concrete house is plastered with mud and cow dung. There are no big shifts in the way they use spaces. Their tradition is reflected in the interiors and usage patterns.

Thayannam kudi
Area- 260 Sq.ft
Concrete building with asbetos sheet roof
2rooms dwelling
-Hall and kitchen
Thermal comfort poor

Details of Muthuvan house typology 3

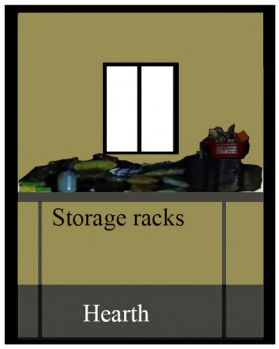


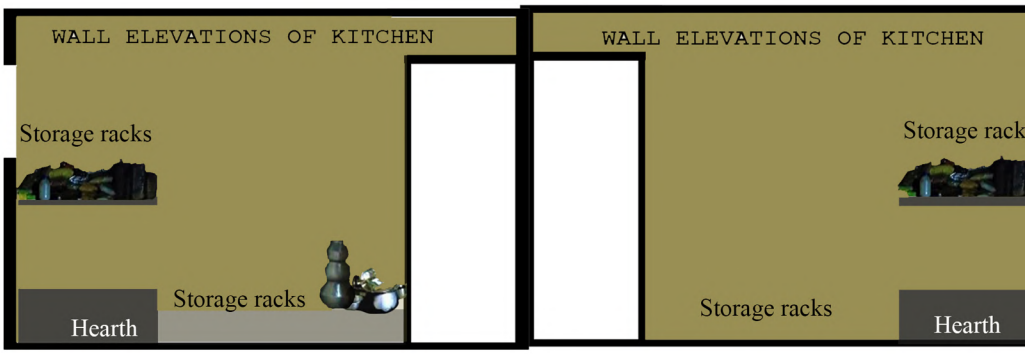
Ventilation

3.16 There are 2 doors and 4 windows for ventilation. One door is at the entrance and the second one is from the kitchen. There is no proper air circulation through the house.

Building Envelope Material

3.17 Walls are made up of hollow bricks and cement mortar. The roof is flat and made of concrete. Thermal insulation of this building is very poor. It is very hot inside the house in summer and very cold in winter season. The interiors of the house including wall is plastered with mud and cow dung .





Details of Muthuvan house typology 3

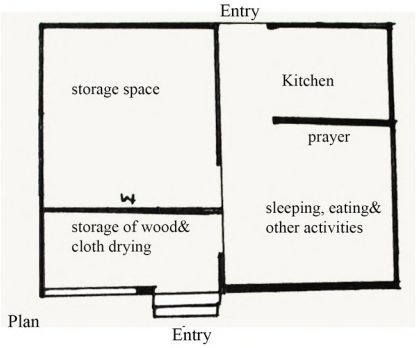
Housing Typology Four

Spatial configuration

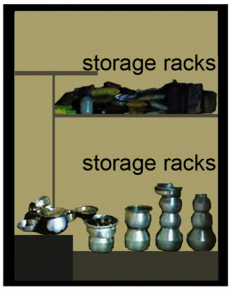
3.18 This dwelling comprises of a veranda, hall, room and a kitchen. Veranda is used for sitting, storing firewood and drying cloths. The hall is used for eating, sleeping, spending time together and other activities. a raised platform is built in the hall for keeping things and a rack is fixed in the wall for keeping deities and used as prayer area.The room for sleeping is used as storage

Kulachuvayal kudi
Area- 310 Sq.ft
4rooms dwelling- Sitout, room, hall and kitchen
Concrete buildig with asbetos sheet roof
Space- variation in the pattern of usage
Thermal comfort poor

Details of Muthuvan house typology 4



storage space where they store grains, seeds and other agricultural equipment. Kitchen is built like their traditional kitchen. The interior of concrete house is plastered with mud and cow dung. There are no big shifts in the way they use spaces. Their tradition is reflected in the interiors and usage patterns.



Ventilation

3.19 There are 2 doors and 4 windows for ventilation. One door is at the entrance and the second one is from the kitchen. There is no proper air circulation through the house.

Details of Muthuvan house typology 4

Building envelope material

3.20 Walls are made up of hollow bricks and cement mortar. The roof is flat and made of concrete. Thermal insulation of this building is very poor. It is very hot inside the house in summer and very cold in winter season. The interiors of the house is plastered with mud and cow dung.

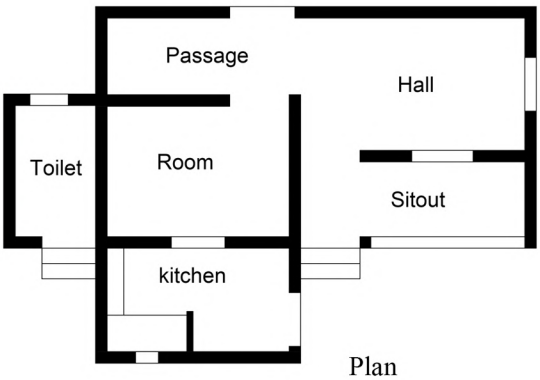
Housing Typology Five

Spatial configuration

3.21 This dwelling comprises of a veranda, hall, room, passage and a kitchen. The hall is used for sleeping and other activities. The room provided for the kitchen is converted to storage and a traditional kitchen is built separately in front of the house. The kitchen is small in size and used efficiently. They cook and eat inside the kitchen. The kitchen is built attached to the concrete house. Both the building is maintained well. But the thermal comfort inside concrete house is poor. There are some differences in the usage of spaces and furniture is added to the interior.

Kulachuvayal kudi
Area- 360 Sq.ft
4rooms dwelling- Sitout, room, hall and kitchen
Concrete buildig
Space- variation in the pattern of usage
Thermal comfort poor
Traditional mud kitchen is built attached to the concrete house

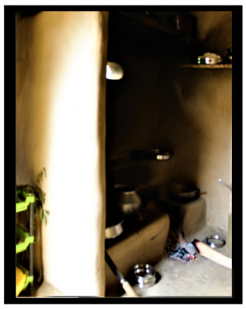
Details of Muthuvan house typology five



Plan

Ventilation

3.22 There is one door at the entrance and 2 windows for ventilation. Room has no windows. There is no proper air circulation through the house.



Interior view of kitchen

view of kitchen

Building Envelope Material

3.23 Walls are made up of hollow bricks and cement mortar. The roof is flat and made of concrete. Thermal insulation of this building is poor.The interiors of the house is cement plastered. Kitchen made up of mud is attached to the building. Kitchen is constructed in a traditional way.

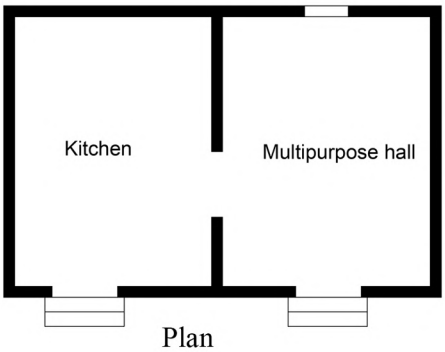
Dtails of Muthuvan house typology 5

Housing Typology Six

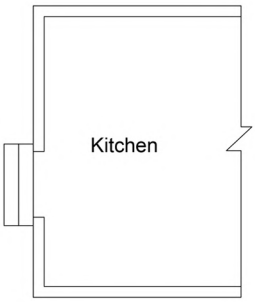
Spatial configuration

3.24This dwelling comprises of a hall and

kitchen. The hall is used for sleeping, storing things and other activities. The space given for kitchen is not used for cooking and it is used as storage space. The room is renovating to kitchen. They find difficulty in repairing the concrete building.



Plan



Ventilation

3.25 There is no proper air circulation through the house.

Kuthukallu kudi

Concrete buildig with asbetos sheet roof
Space- variation in the pattern of usage
Thermal comfort poor

Details of Muthuvan house typology 6

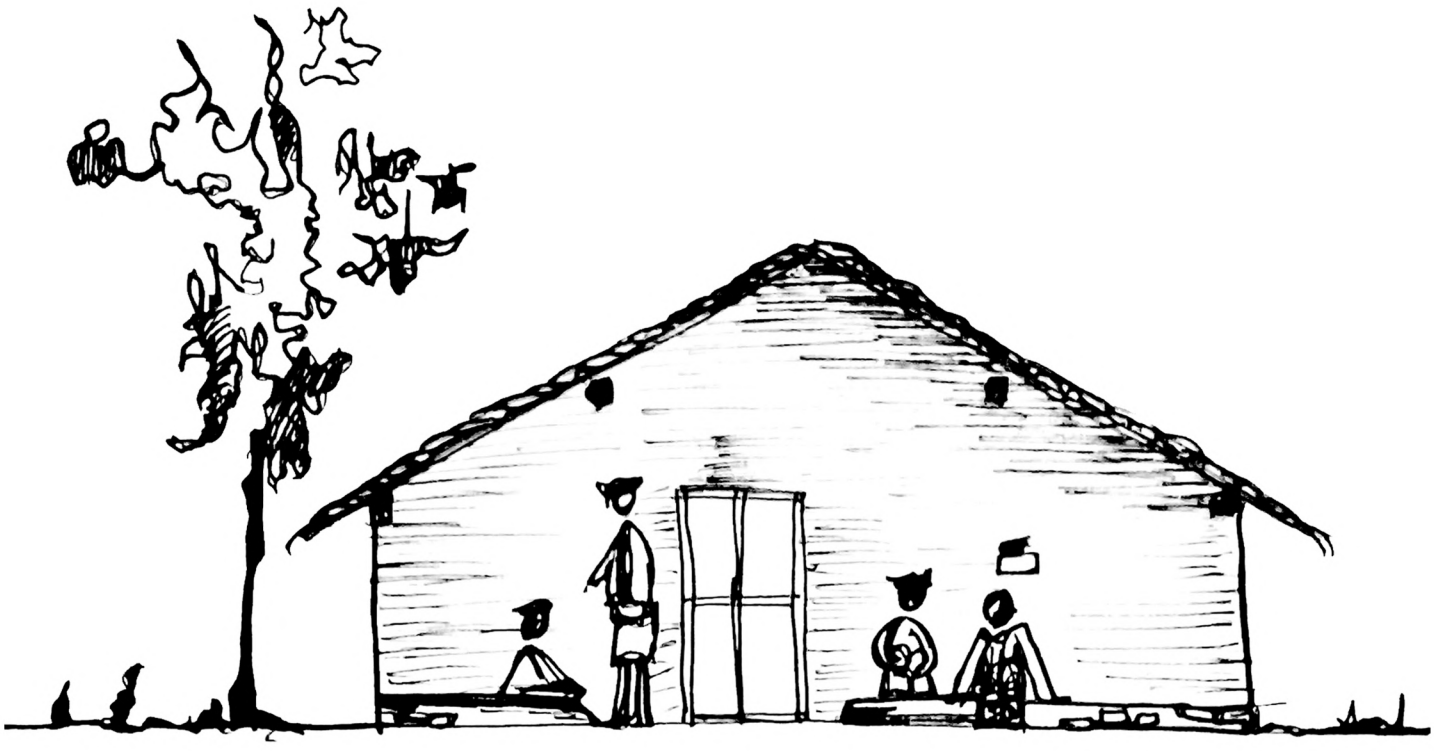
Building envelope material

3.26 Walls are made up of hollow bricks and cement mortar. Thermal insulation of this building is very poor. It is very hot inside the house in summer and very cold in winter season. The interiors of the house is plastered with mud and cow dung. Maintenance of the concrete building finds difficult due to the lack of skill and availability of materials

WALL ELEVATIONS OF HALL

The Chavadi

3.27As mentioned, Chavadi is the dormitory for men and which is located at the top level of the settlement. Unmarried men and even old men in the settlement sleep here. The Chavadi act as a common realm to connect men of the community. All the gatherings and activities that usually take place in a Chavadi. Chavadi acts as a recreational space for the Muthuvan men. They spend evenings and nights talking, singing, and sleeping inside the Chavadi. They discuss problems of community there. The Chavadi also acts as a protection to the community. Men who stay in the Chavadi are responsible for watching wild animals and other disturbances to the community. The Chavadi is located on top most contours or at the entrance to catch maximum visibility to the whole settlement. The Chavadi is well maintained in each community. The Chavadi binds the community together. The Chavadi has greater potential in a community centric living. The Chavadi is active in the evening and nights.

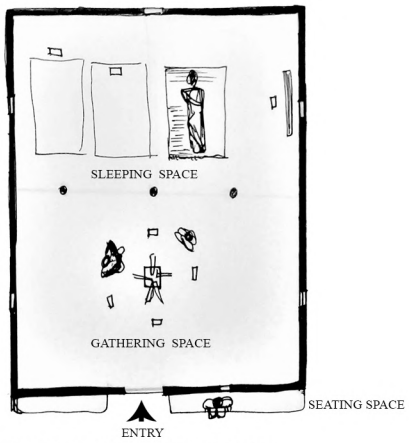


Sketch of Muthuvan chavadi

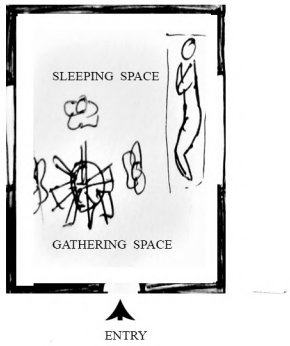
3.28 Chavadi is made up of mud walls and thatch/sheet roof and which is well maintained with mud and cow dung plaster. It is a single hall dwelling. Firepit is built inside the hall and the smoke from the fire enhances disinfection.

3.29 There is a traditional Chavadi in Shedukudi which is a mud and thatch building maintained with mud and cow dung plaster. Fire Pit is built inside the hall and the smoke diffuse and vent through the small gap between wall and roof. The height of the building is comparatively low. While fuming one cannot stand inside which eventually make them either seated or lie-down. It seems like a hut is fuming at night which protect them from wild animal attack. It needs to be conserved and will be the best to be implemented for the wellbeing of the community as it is the sustainable model for the Chavadi.

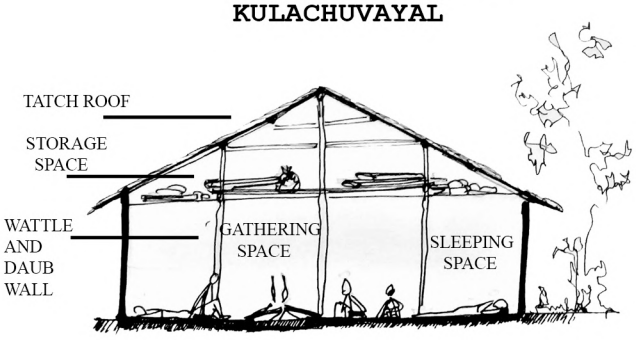
Schematic plan and section of Muthuvan chavadi



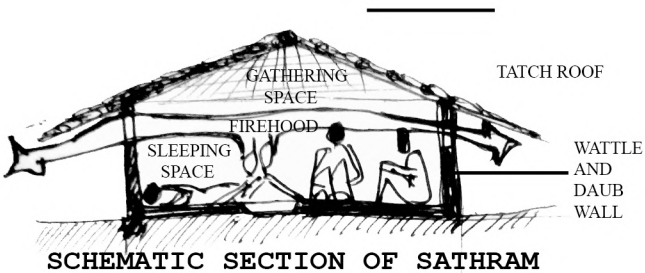
PLAN OF SATHRAM KULACHUVAYAL



PLAN OF TRADITIONAL SATHRAM SHEDUKUDI



SCHEMATIC SECTION OF SATHRAM KULACHUVAYAL



SCHEMATIC SECTION OF SATHRAM SHEDUKUDI

VIEW OF SATHRAM
KULACHUVAYAL

The Kuliveedu

3.30 As mentioned Kuliveedu is used for night stay of girls and during menstruation. Kuliveedu is crowded during the night. The Kuliveedu is divided into two sections, in one section of the Kuliveedu menstruating women and girls stay and on the other side non menstruating women stay. Menstruating women spend four days in this dwelling. Kuliveedu comprises small cooking space for the menstruating women.

3.31 Kuliveedu is a single dwelling comprising of cooking space and sleeping space. It acts as a multipurpose hall. Kuliveedu has two doorways. One door way is used by menstruating women and the second door way is used by the non-menstruating women. The sleeping space is divided into two by small rise in floor level. Menstruating women and non-menstruating women who accompany them during night sleep in separate spaces.

3.32 Menstruating women cook food for themselves inside the dwelling. Kitchen utensils are kept at the corner of the room near hood. Storage racks are made using bamboo sticks on the wall. Cloths which menstruating women use during menstruation are tied and hung in the rafters of the roof and bed sheets and clothes are hung on the wall for consecutive use every months

3.33 Kaliveedu is a small multifunctional space unit which used efficiently. The Kuliveedu is made up of mud and bamboo. wattle and daub wall and mud flooring is common construction method of

View of Muthuvan chavadi at Kulachuvayal kudi.

Kuliveedu. It helps the dwelling to be cool in summer and warm in the rainy season. Traditional Kuliveedu has thatched roof. The walls are mud plastered and pattern using fingers decorates wall. There is no ventilation other than two doors so that smoke is trapped during cooking. It creates suffocation and increase discomfort during summer. There are no toilet facilities and women depend on streams for bathing and other purposes. Women spend their full day inside the dwelling.

Sketch of Muthuvan Kuliveedu

KULIVEED
MEENKUTHIKUDI

KULIVEED
KUTHUKALLUKUDI

KULIVEED
KAMMALAMKUDI

KULIVEED
VENGAMPARAKUDI

KULIVEED
AMBALAPADI

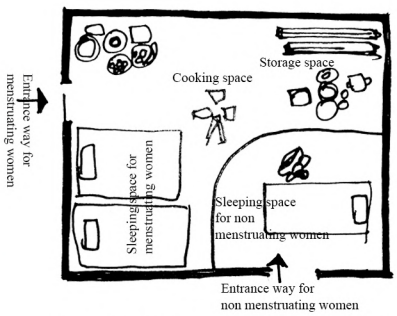
KULIVEED
MULANKAMUTTIKUDI

KULIVEED
PUTHUKUDI

KULIVEED
KULACHUVAYAL

Kuliveedu of different Muthuvan settlements

VIEW OF OLD KULIVEED KAMMALAMKUDI

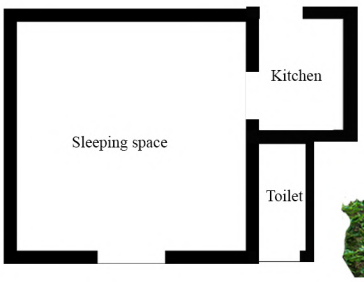

Storage space
Cooking space
Entrance way for menstruating women
Sleeping space for menstruating women
Sleeping space for non menstruating women
Entrance way for non menstruating women

PLAN OF NEW KULIVEED

Kuliveedu, Kammalam kudi

Details of Muthuvan Kuliveedu, Kammalam kudi

3.34There are two kuliveedu in kammalam kudi muthuvan settlement. One is built in traditional way and other one is a concrete building with toilet facilities. There is no proper dainage in the new building. They use their old kuliveedu and depend on streams for water. The condition of kuliveedu is poor. Even though the mud building with thatch roof provides thermal comfort it is not easy to maintain. The mud floors get wet during monsoon. Menstruating women have to do all the maintanance works by themselves because men do not enter to kuliveedu once they are used by menstruating women. There is no storage space for firewood Kuliveedu is less hygiene and there is no toilet facilities. Condition of kuliveedu is poor in all settlements.



PLAN OF NEW KULIVEED

VIEW OF NEW KULIVEED KAMMALAMKUDI

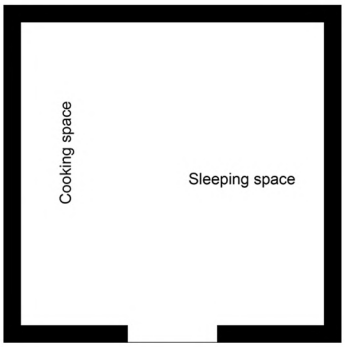
INTERIOR VIEW OF NEW KULIVEEDU

INTERIOR VIEW OF OLD KULIVEEDU

Kuliveedu, Puthukudi

3.35 Each settlement possess one kuliveedu. Smallest kulieedu is found in Puthukudi Muhuvan settlement. A single dwelling comprising cooking and sleeping spaces. Cloths are hanged in ropes on wall. Bathroom and washing area is provided near kuliveedu. The building is made up of Mud. Ithas low plinth so that the floor get dampened during monsoon.

Above
Kuliveedu,
Kammalamkudi
Kuliveedu, Puthukudi
(Below)



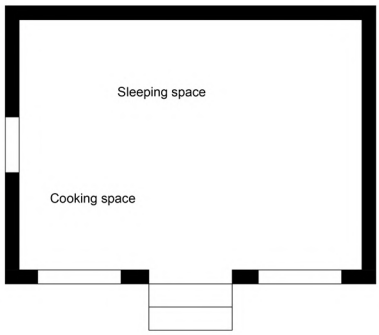
INTERIOR VIEW OF KULIVEED

Kuliveedu, Kulachuvayal kudi

Above Details of Muthuvan Kuliveedu, Puthukudi
Details of kuliveedu kulachuvayal (Below)

3.36There are two kuliveedu in Kulachuvayal Muthuvan settlement. A new kuliveedu comprising of 3 rooms, one hall, kitchen and attached toilet is not used efficiently due to the location of kuliveedu.Kuliveedu is located near

VIEW OF OLD KULIVEED KULACHUVAYAL



PLAN OF OLD KULIVEED

PLAN OF NEW KULIVEED

VIEW OF NEW KULIVEED
KULACHUVAYAL

main road and opposite to sathram. Menstruating women hide from men and public so they dont use the kuliveedu which is near to public spaces. They use old kuliveedu which has more privacy than the new one. It is a single hall dwelling comprising of both cooking and sleeping spaces. There is no toilet facility in old kuliveedu and storage space is needed for storing firewood. It is very hot inside the kuliveedu during summer. The heat from the hearth and smoke fills the room and cause discomfort.

INTERIOR VIEW OF KULIVEED

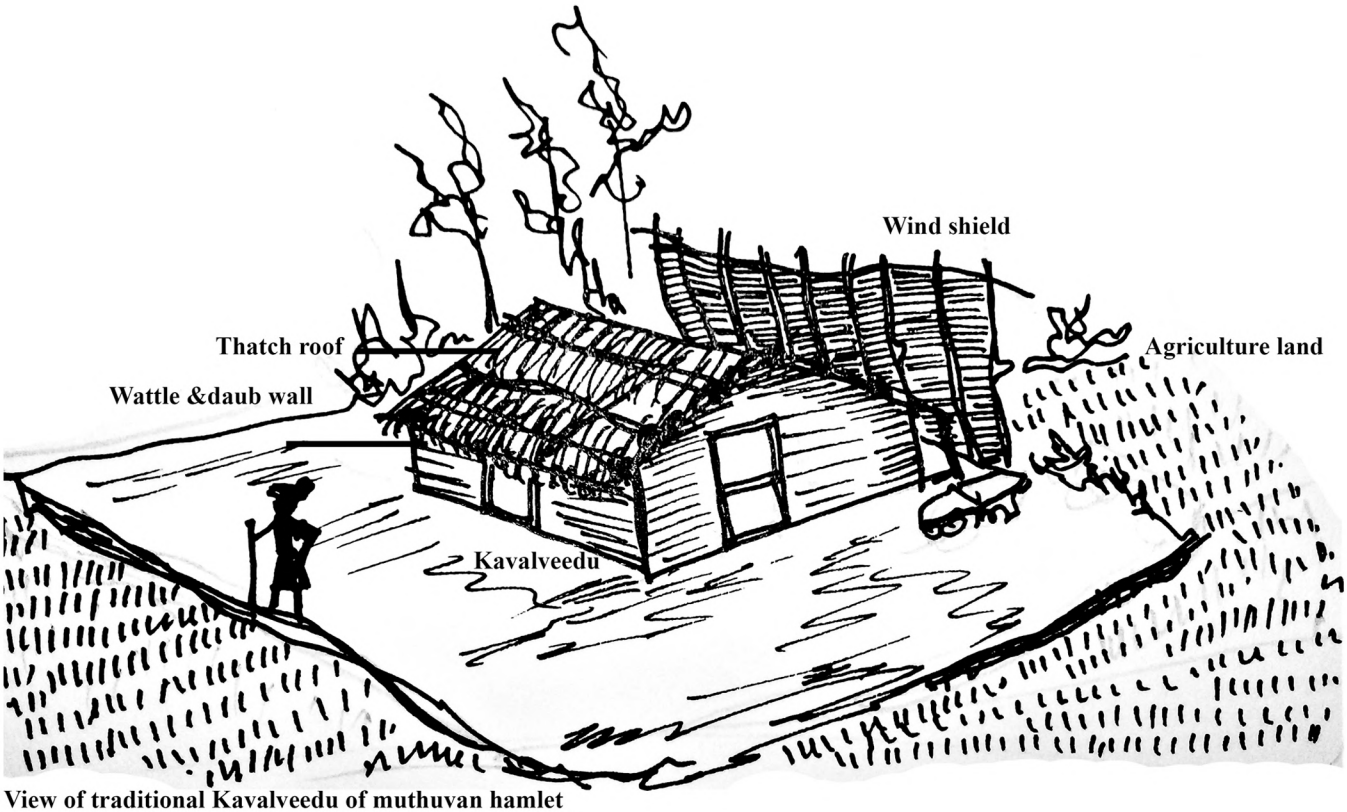
INTERIOR VIEW OF KULIVEED

INTERIOR VIEW OF KULIVEED

The Guardhouse

3.37 A small dwelling comprising of cooking space and storage space is built with mud and thatch in the centre of field. Every family has their own agricultural fields and each field has a Kavalveedu for security purpose. One member of the house stays inside the Kavalveedu at night for protecting agriculture from wild animals.

Kuliveedu, Kulachuvayal settlement (Above)



View of traditional Kavalveedu of muthuvan hamlet

The Temple

3.38 Every Muthuvan settlement have one temple which is positioned at the topmost contour of the site and which is considered as the most sacred place of the settlement. Men can enter the temple anytime but women are allowed only during pongal festival. There we can see a transformation of temple structure from traditional sacred groves to modern temple structure. Traditionally temples were stone deities worshiped under trees and now it is replaced by temple structures and typical Hindu idols.

Sketch of Guard house

Construction Techniques of Muduvan Community

3.39 The Muthuvan community is known for their unique mud house construction. It's the practice of the tribe to collectively gather and complete the whole construction process. The construction is considered an important part of their culture and community participation is their custom. The traditional mud houses of the Muthuvan are climate responsive and eco-friendly.

View of a traditional muthuvan house

THATCH ROOF

Roof is thatched with grass(Theruppu pullu). Insulate house in both warm and cold weather. It ensure that house will be cool in summer and warm in cold.

WATTLE AND DAUB WALL

Structure that supports roof. Bamboo &cane frame called wattle is plastered with sticky mud. Provide high thermal insulation. lighter in weight. Best for earthquake prone areas.

MUD PLASTERED WALL

Wattle &daub wall is plastwred with mud. final coat is made up of fine material with a moderately high clay content and is applied as thinny as possible to achieve full coverage .

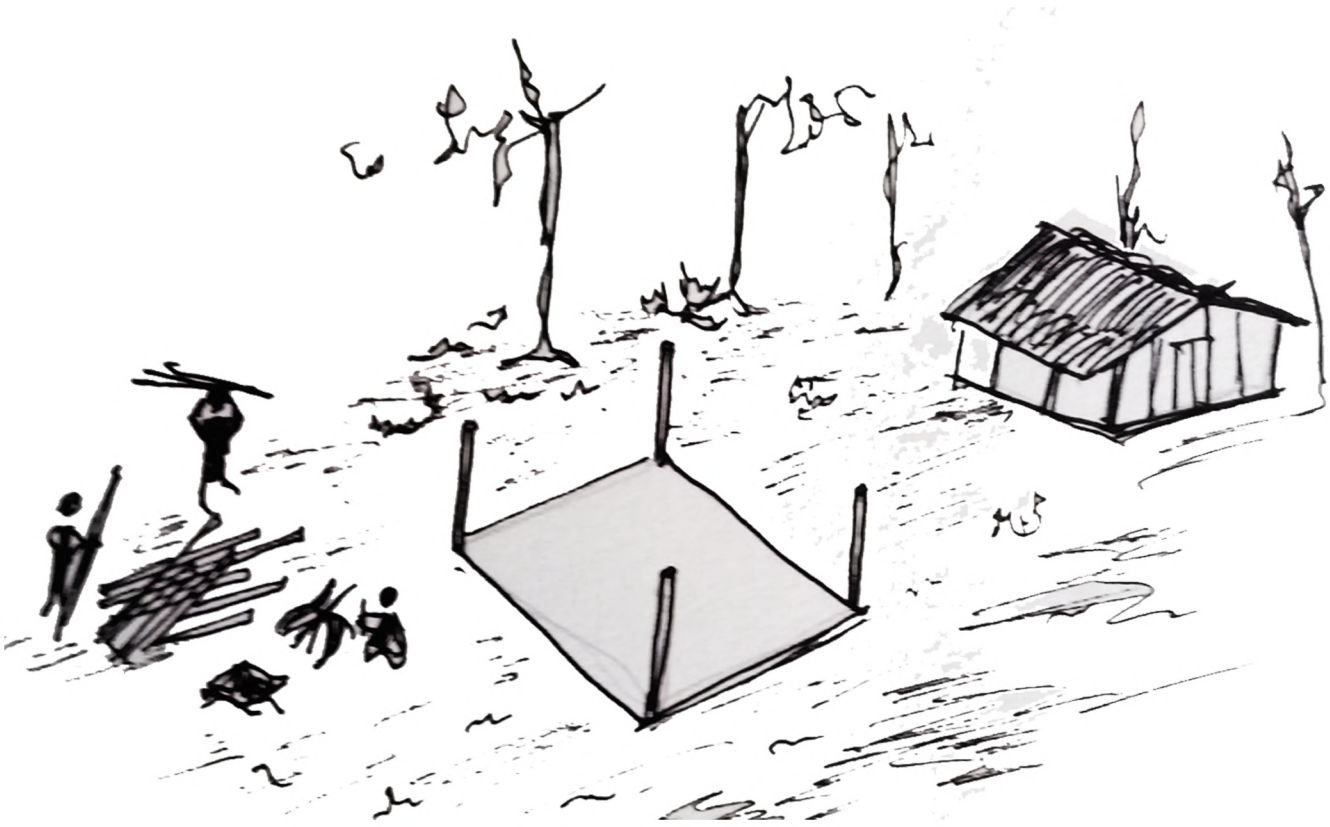
MUD FLOORING

Mud floor laid as a plaster mixture. The soil mixture should be slightly higher in clay content than the material for plaster. Pebbles are used to achieve a smooth, crack- free surface. Final coat is made up of cowdung.

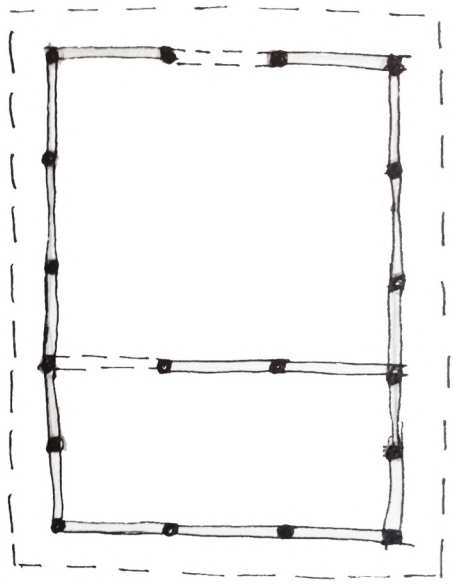
Figure 37 Details of Muthuvan house construction techniques

3.40 Bamboo and mud are the basic components of Muthvan building constructions. The traditional houses usually have roof of grass or bamboo leaves. It keeps the interiors warm even in the coldest season and cold in summer season. They feel comfortable living in the Mud houses. The houses have a multipurpose hall and a small kitchen. During summer they burn firewood throughout night in the hearth. the heat from the hearth emanates to the house through mud floor. These mud houses can withstand any climatic variation of the region and have a lifespan of 30 years. Continuous maintenances required and it is part of their activity. The figure 36 to 42 depicts the various processes and structural frame works employed in the construction of a traditional Muthuvan house. As mentioned, the construction of traditional house, Chavadi, Kuliveedu, and temple are part of their routine activities wherein materials are collected from forest, while returning from work.

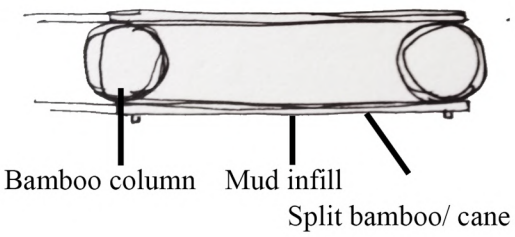
Details of a traditional muthuvan house construction



Muthuvan House Construction



Plan of muthuvan house



Details of Muthuvan house construction techniques

3.41 Construction steps-

The materials required are gathered from forest beforehand construction. They collect materials whenever they go to forest for requirements like collecting wood for daily chores.The construction is commenced only after collecting the materials. It takes 3-4 weeks for the completion of the construction of a mud house.

* Ground preparation
* Site clearance- Site for construction is cleared
* Ground leveling- Leveling of ground is done using sticks and hoe. A total of 2-3 people are required and the process is usually di=one in a single day. The construction is started 2 days after the preparation of the ground
* A trench of 30cm width is dug as per the plan of the house
* Stakes of bamboo/ other available wood of diameter 10-15cm is placed vertically in the corners of the trench in order to provide the frame work for the infill. It is a one day work requiring 4-5human resource.
* Once the stakes are placed completely, split bamboos are fixed/nailed on these poles horizontally. It is done on both sides. The task requires a work force of 4 people for 2-3 days. After the construction of theframes/wattles starts the work of main beam and roof. Once the beam and roof beams are completed, rafters are placed to the structure.
* After the frame work/skeleton structure is completed women start the infill.

Black mud mixed with water manually, to create a thick paste to fill the wattle for walls.

Once the mud is filled they apply more mud as an outer cover and plaster it using fine mud which is usually called “Puthumannu” after 2 days of this process the final layer of platering are done. It requires 3 women and 2 days to finish.

* Roof frame

Slope roof is used in order to wash off the rain. The roof frame if covered with grass and reeds collected from forests. The making of roof requires 3 days and skilled work force of 6 people are required.

*Mud plastering

Mud plastering starts after completing wattle and daub wall. Final coat of plastering is made up of fine material with a mederately high clay content .

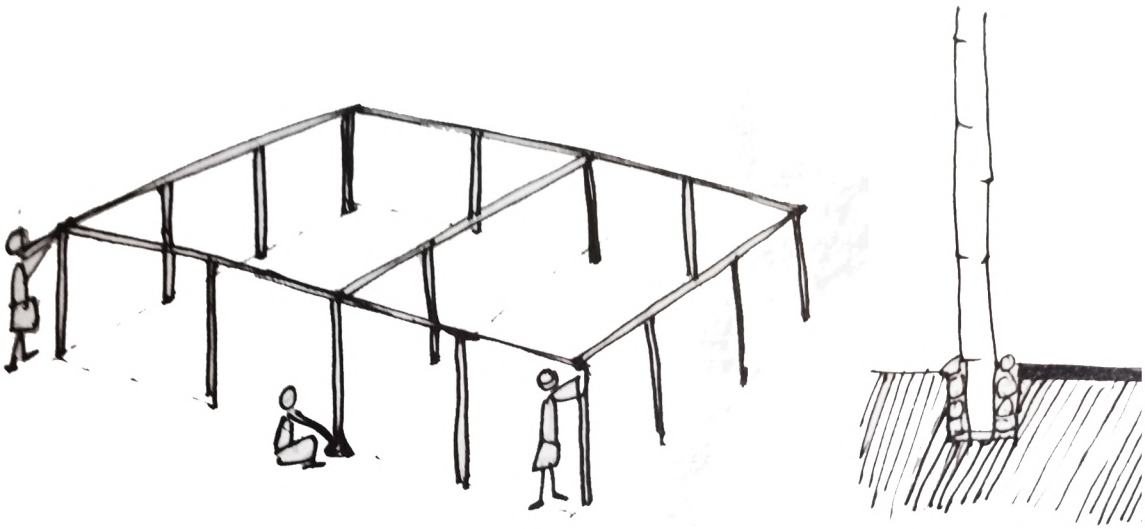
*Flooring

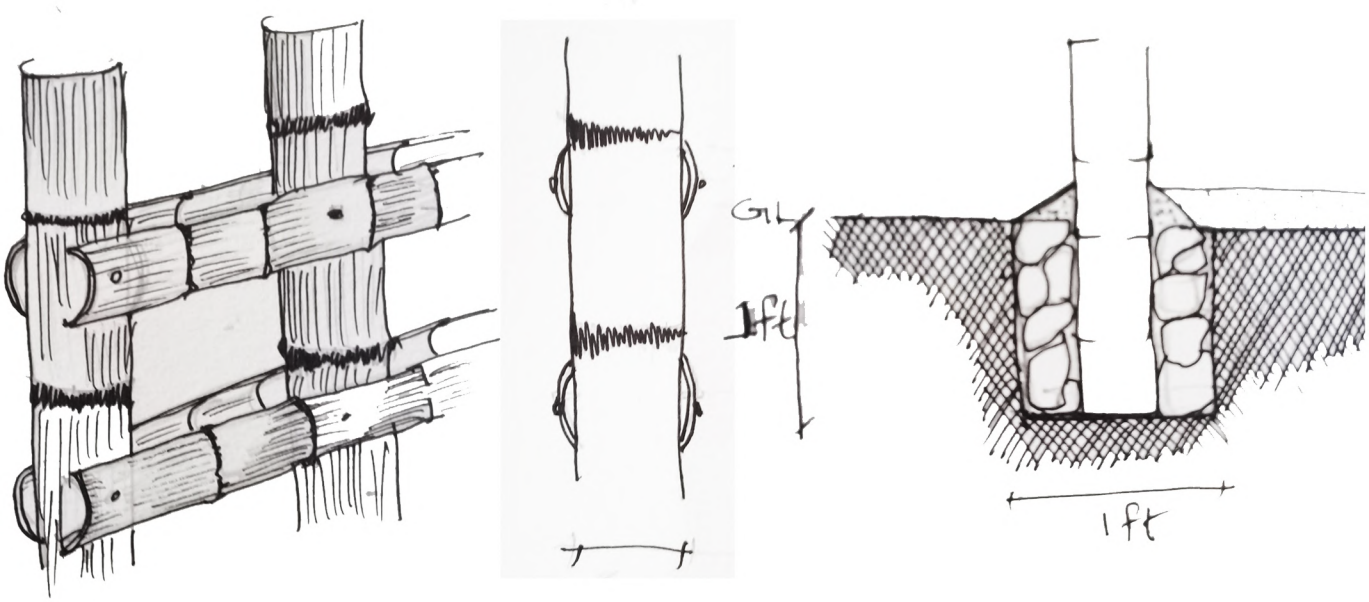
Mud floor laid as a plaster mixture. Final coat is done using cow dung. They use pebbles to level and smoothen the floor.

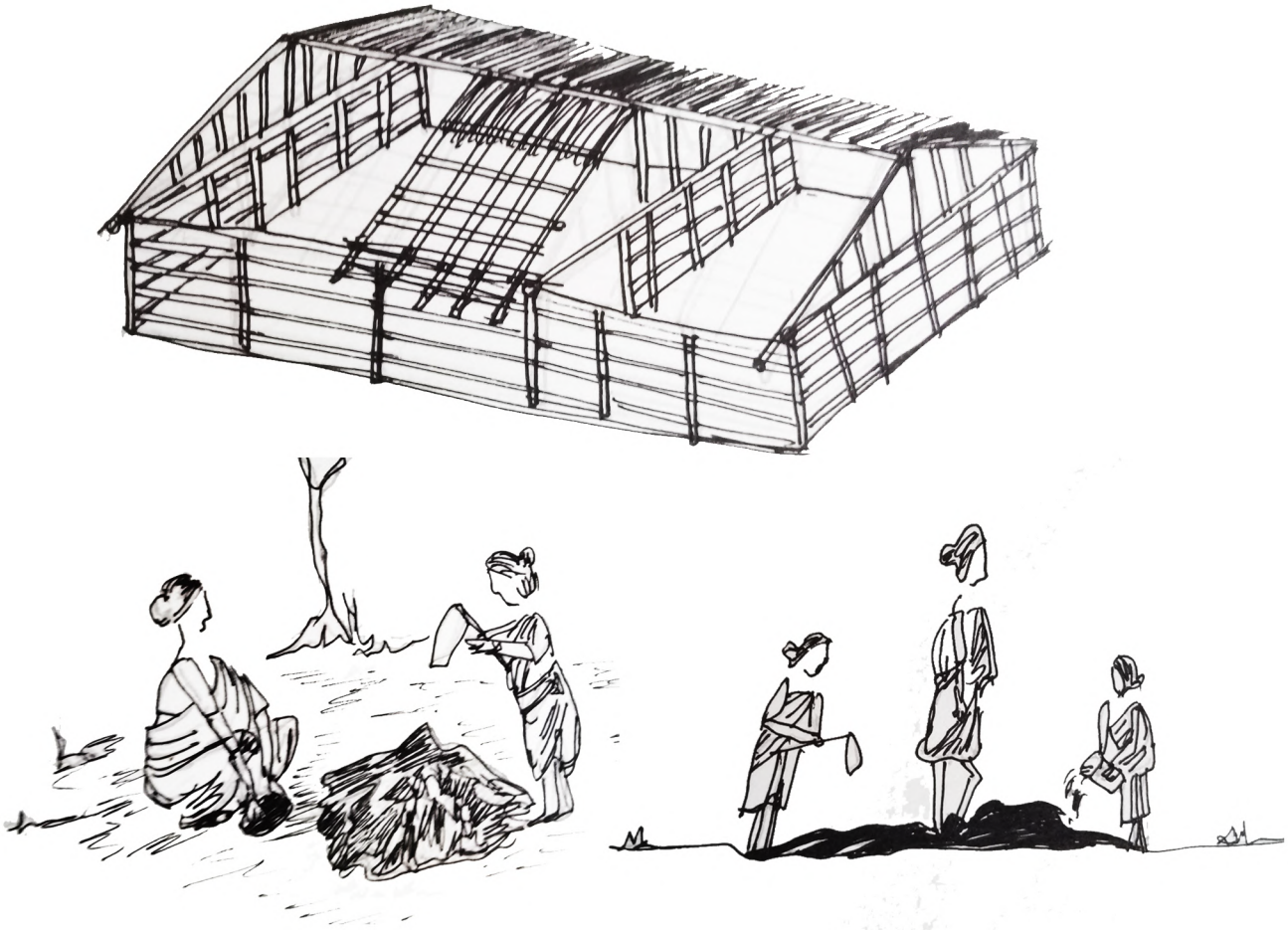
WATTLE AND DAUB WALL - FRAME WORK

3.42 Bamboo and cane frame work for making wall is called wattle. main columns are posted at the corners and intermediate columns are provided for the stability of structural system. canes or split bamboos are horizontaly arranged and naied or tied to the main vertical members.after completing the frame work mud plaster is filled.stabitity. it provides good insulation.

Details of a traditional muthuvan house construction







Details of Muthuvan house construction techniques

STRUCTURAL FRAME WORK

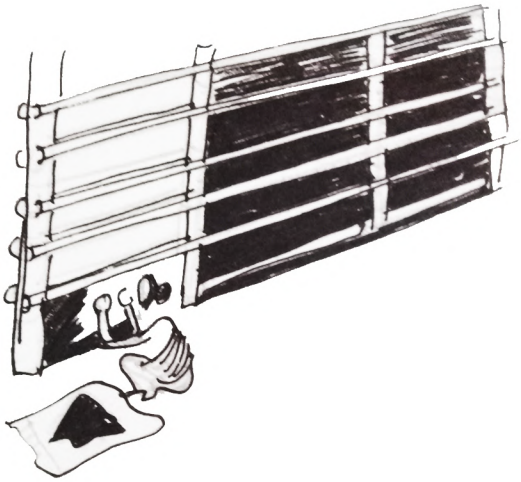
3.43 Wattle and daub wall supports roof structure. muthuvan houses have slope roof. roofs are thatched with forest grass called thiruppu pullu. thatched roof is a good insulator.It insulate house in both warm and cold weather. It ensure that house will be cool in summer and warm in cold. roof structure works starts after completing the wattle frame. small bamboo or wood is used for purlins and main beams are 4-5 inch bamboo (kallan mula). frame works are usually done by men of the community.

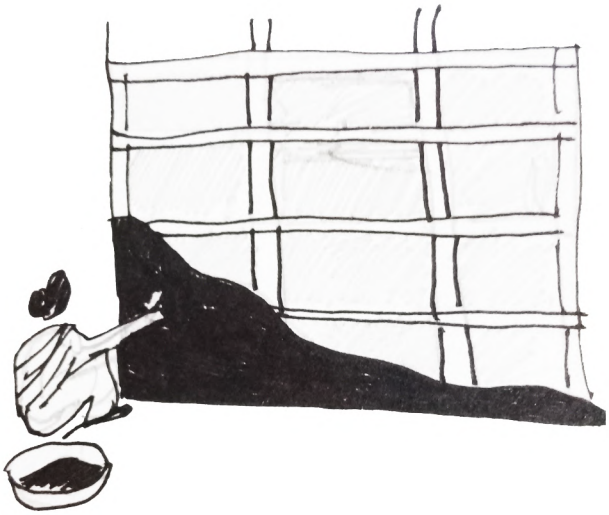
MUD MIXING

3.44 Mud is abundant in nature. Soil and water is mixed to be mud. it should be sticky. after mixing the sticky mud is filled in wattle. and finest mud is used for the final coat plastering of walls.

MUD PLASTERED WALL

3.45 wattle &daub wall is plastwred with mud. bamboo and cane frame called wattle is filled with soil mix. Aggregates of stone in the mixture increses stabitity. Mud plasterig starts after completing wattle and daub wall . Final coat of plastering is made up of fine material with a moderately high clay content and is applied as thinny as possible to achieve full coverage .





MUD FLOORING

3.46 Mud floor laid as a plaster mixture. The soil mixture should be slightly higher in clay content than the material for plaster. Pebbles are used to achieve a smooth, crack- free surface. Final coat is made up of cowdung. It helps to attain compact and dust free floor. This final coat repeats in every month. Good maintanance is required for a smooth surface. Mud flooring and its maintanance is done by the women of house. Hand patches can be seen in the floors which adds the hand made beauty.

Details of a traditional muthuvan house construction

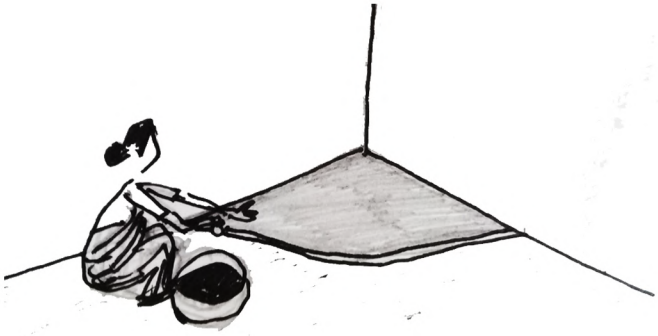
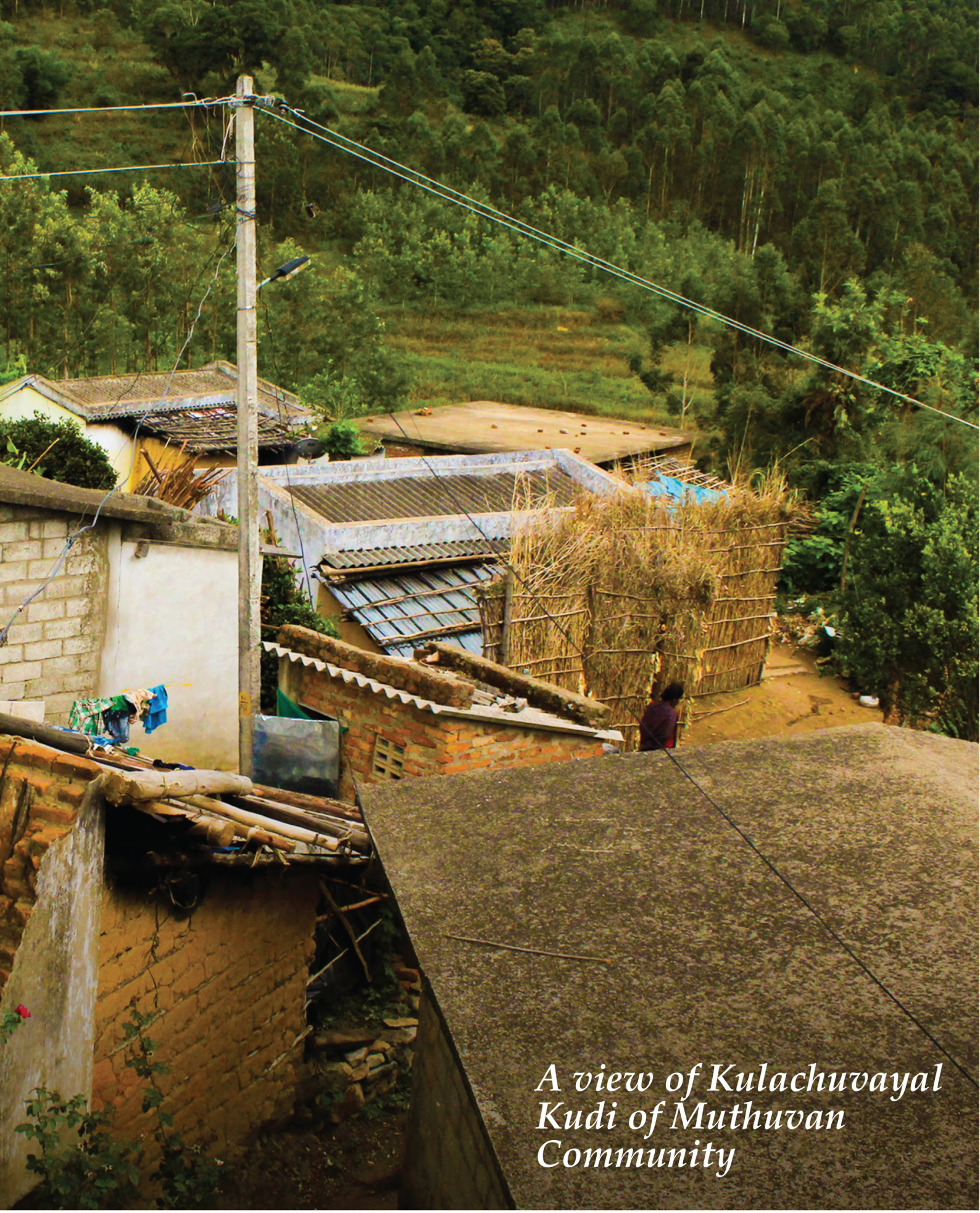


Figure 43, 44 Muthuvan Houses , Mulankamutty kudi



A view of Kulachuvayal Kudi of Muthuvan Community

Chapter Four

An Evaluation of Existing Housing Schemes for the Muthuvan Community

4.1 The Muthuvan community was self-sufficient to meet their basic needs and depended on the local market only for a few things such as salt, clothes, ornaments, and tools - prior to the deployment of the various housing schemes for them. Owing to their traditional mode of construction and the use of natural materials in construction, the Muthuvan community did not require much capital to meet their housing needs. The Muthuvan earned

relatively higher revenue as compared to other tribal communities by selling cash crops and cattle in markets nearby. The marketing agents and traders from outside would visit the Muthuvan Kudi proposing business deals for their agricultural produce, spices, and cattle. The Muthuvan comminity were gifted with vast expanses of land rich in natural resources. Their collective life revolves around farming, construction and maintenance of their Kudi, and the social and cultural activities in the Kudi.

4.2 As mentioned, the construction of houses and other spaces in the Kudi are carried out by the collective coorperation of the community. If there are any conflicts between the individuals in the community, they have an internal system that helps resolve it; this traditional system continues to prevail in Kudis located in semi-isolated places. For most tribal communities, their occupation, the construction of their settlements, and their socio-cultural system are interrelated. Therefore, if anything happens to one of these components, it will have an effect on the other. Hence, any intervention or engagement with tribal communities should be carefully designed and implemented without disrupting the benefits of the existing system in the community. It is observed that many of the schemes and policies that have been implemented as measures of development and social changes in the tribal communities often led to negative results, and sometimes dented the life of the tribal community. This chapter attempts to examine the existing housing schemes and policies that have been implemented among the Muthuvan people. The study focuses on Marayoor, Kanthalloor, Adimali, Devikulam and Idamalakkudi Panchayaths of Idukki district.

The Agencies that are Providing Housing

4.3 In Kerala, there are several agencies in implementing various housing schemes and helping people construct houses in the State. These include Housing Board, Kerala State Co- operative Housing Federation, Kerala State Development Co-operation for SC/ST Development Department,

and Kudumbashree, which implements Ashraya Housing Scheme for the destitute, among others. Government agencies such as COSTFORD, Habitat Technology Group, Kerala Police Housing and Construction Corporation, Forest Department, etc. have also supported the construction of houses. Departments working for the welfare of laborers, fishermen, lower caste, etc. are also implementing various affordable housing schemes for people from economically weaker sections. The following section elaborates on the achievements under major housing schemes by various housing agencies in Kerala.

Panchayath	Beneficiaries	First installment received	Work started
Marayoor	243	211	211
Kanthalloor	137	51	51
Edamalakkudy	135	78	78
Vattavada	60	12	10
Total	575	352	350

Table 1: House Construction for STs under Life Mission Source: Tribal Development Office, Adimaly 2019

The One Lakh Housing Scheme

4.4 The 'One Lakh Housing Scheme' was implemented in 1972, and was the first of its kind. It was designed to provide a permanent dwelling for the landless agricultural labor households that had not received homesteads under the Kerala Agrarian Relations Act of 1960. The Government scheme received generous support from voluntary organizations. The implementation was carried out with the participation of local inhabitants, political parties, and social and cultural organizations. The scheme was renamed as MN Lakshamveedu Punarnirmana Padhathi on 19.09.08; it in envisaged for the reconstruction of houses constructed under the One Lakh Housing Scheme of 1972-76 period.

The approved subsidy rate under the renamed scheme for people belonging to the general category is Rs.75000, for those belonging to the Scheduled Caste is Rs.100000 and for those belonging to the Scheduled Tribe is Rs.125000.

Maithri Housing scheme

4.4 The Kerala State Housing Board launched the Maithri Housing Scheme in 1996. The unit cost of a Maithri house is Rs.30, 000, of which Rs.9000 is subsidized by the Government, Rs.19,000 is provided as a loan by HUDCO and Rs.2000 is received as a voluntary contribution. Besides this, an interest subsidy of 8% is committed by the Government. The Kerala State Housing Board (KSHB) borrowed nearly Rs.712 crores from HUDCO for providing loans to 3.75 lakh beneficiaries under this scheme. The Board further extended loan assistance to 2.30 lakh beneficiaries.

Indira Awaas Yojana (IAY)

4.5 The Indira Awaas Yojana, which was later renamed as Pradhan Mantri Gramin Awaas Yojana (PMAY) is one of the most successful social flagship programmes introduced by the Central Government in the pursuit of providing housing for the rural poor in India. Launched in 1985 as part of the Rural Landless Employment Guarantee Programme (RLEGP), Indira Awaas Yojana (IAY) was incorporated into the Jawahar Rozgar Yojana (JRY) in 1989 and has been operating as an independent scheme since January 1996. During the years 1993 and 1994, this scheme extended its reach to non-SC/ST categories also. From 1995-96 the scheme has been further extended to widows or next-of-kin of defense personnel who were killed in the line of duty, and ex-servicemen and retired members of the paramilitary forces who wished to live in rural areas, considering they qualify the eligibility criteria (Source Wikipedia).

District	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Thiruvananthapuram	63	80	70	299	715	
Kollam	41	30	52	131	235	
Pathanamthitta	50	32	80	124	0	
Kottayam	70	49	55	98	121	
Idukki	150	100	158	361	1462	
Ernakulam	50	32	43	86	190	
Thrissur	43	28	42	80	152	47
Palakkad	167	103	158	404	3392	1040
Malappuram	53	31	50	100	470	92
Kozhikode	58	32	40	79	249	12
Wayanad	421	225	308	823	2826	5454
Kannur	63	32	52	94	342	24
Kasaragod	100	63	75	221	1185	40
Total	1329	837	1183	2900	11339	6709

Table 2: Sanctioned Houses by ST Development Department
Source: ST Development Department, 2019

4.5 The broad purpose of the scheme is to provide financial assistance to the weakest sections of society by constructing a house for them. The vision of the government was to replace all temporary (kutcha) houses from Indian villages by 2017 with pucca houses. The funds are allocated to the states based on the shortcomings in rural housing, which is met with a weightage of 75% and a 25% weightage on poverty ratio. The housing shortage is assessed as per the figures published by the Registrar General of India, based on the 2001 Census. Software called "AWAAS Soft" was launched in July 2010 to assist in the administration of this scheme. Under the scheme, eligible people will get financial assistance from the government amounting to Rs. 1.2 lakh for constructing their houses in rural areas and an additional amount of Rs.12, 000 for the construction of toilets.

Life Mission

4.6 The Total Housing Mission LIFE (Livelihood, Inclusion and Financial Empowerment) 'is envisaged as a one-time programme for wiping out the problem of lack of housing in Kerala among the poor and to develop a sustainable model for addressing the housing needs of the poorest of poor. The mission aims at improving the quality of LIFE within the next three years by not only providing houses and allied facilities to the landless and houseless but also raising their living standards through skill building to enable them to take up livelihood activities. The LIFE Mission will benefit homeless families with land, families owning incomplete/ dilapidated houses, families having semi- permanent/ semi-legal houses in government land/ coastal area/ plantation area and families who are landless and houseless. The mission will provide financial assistance to homeless families with land for construction of new houses at the rate of Rs. 4 lakh for those in general category and Rs. 4.5 lakhs to Scheduled Caste, fishermen and plantation workers. Beneficiaries in the Scheduled Tribe category will be assisted with the actual amount for the completion of houses' (Harikishor 2017).

Settlements/ Scheme	Self made/ Traditional	IAY	PMAY	ITDP	Total
Mulangampetty kudi	18	0	0	0	18
Thayannam kudi	8	12	8	0	28
Vengappara kudi	4	13	3	0	20
Kammalam kudi	22	17	13	1	55
Kulachuvayal kudi	16	28	15	3	60
Total	68	70	39	4	181

Table: 3 Settlement wise Classification
Source: Primary Survey, 2019

Amount	Self made/ Traditional	IAY	PMAY	ITDP	Total	Percentage
Nil	2	54	37	3	96	53.03
1-5000	6	1	0	0	7	3.85
5001-10000	30	7	0	0	37	20.44
10001-20000	20	4	0	0	24	13.25
20001-30000	9	1	0	0	10	5.52
30001-50000	1	3	1	1	6	3.31
Above 50000	0	0	1	0	1	0.6
Total	68	70	39	4	181	100.0

Table: 4 Amount Invested by the Owner - Scheme wise Source: Primary Survey, 2019

Edamalakudy Special Package

4.7 Edamalakkudy special package was announced in the financial year of 2012-13 by Scheduled Tribes Development Department (STDD) to address the issues of housing and road connectivity in Edamalakkudy Grama Panchayath, which was formed in 2010. The total amount allotted for the construction of housing and roads was Rs.4, 33, 00,000 and Rs.1, 87, 70,000 respectively. STDD had transferred the amount to the Forest Department (Divisional Forest Office, Munnar) to implement and monitor this Special Package project since this Panchayath is located inside the Forest. However, it is reported that the officers of the Tribal Department in Idukki district were not in favor of this transfer of funds from the STDD to the Forest Department. Most of the construction work carried out as a part of this package stopped before completion, thus leaving incomplete houses and associated troubles to the people in Edamalakudy. The STDD official were of the opinion that the percentage could be implement in the same manner on as implemented by STDD.

Post Flood Schemes

4.8 The heavy rainfall that hit Kerala in the years 2018 and 2019, which led to floods and landslides, created massive destruction across the Idukki district. Edamalakkudy Panchayath, which is located inside the Anamudi Reserve Forest, was among the severely affected during the heavy rainfall. Around 41 houses in Edamalakudy was damaged during the floods. As a part of the relief measures initiated by the State Government, 16 houses got the compensation amount for complete loss and other houses received partial compensation as per the rules of the Government. Under this scheme, some people received money for their damages and some others received around one-lakh rupees to construct a new house. Our researchers observed that, unlike the other schemes, people used locally available materials and invested their efforts and knowledge in the construction of houses under this scheme.

Evaluation of the Housing Schemes

4.9 The analysis of house construction in the selected five Muthuvan settlements reveals that 1/3 of the total houses being constructed in Muthuvan settlement are in traditional ways. There are few settlements like Mulakamutti Kudi, where the houses and other built elements maintain a traditional style. The lack of access by road is the key reason behind this consistency in traditional architecture. In all other Muthuvan Kudi, surveyed the housing and settlement architecture has been subject to drastic transformation in the last couple of decades (See table 3). It is observed that the Muthuvan community has been receiving housing subsidies and schemes starting from the 1980s. The Kudi located near towns received the benefits of housing schemes in the early period and where the different model of houses is more visible.

Gradually the housing schemes included more Kudis and provided support in housing. This study found that 61.33 houses in the Muthuvan Kudi in Idukki district have an RCC roof, these were built under various Government schemes that were implemented in the last two decades. Earlier, the Government agencies also provided houses with tile, asbestos and tin sheet roofs as a part of the schemes. It is estimated that only 4.97 percent of the Muthuvan houses are constructed by themselves in their traditional construction technique. One of the major reasons for this decline in the number of traditional houses, according to its residents is the scarcity of wild straw and bamboo, and the restrictions imposed on their access to the forest. Some members of the community shared that they feel more comfortable and safe under a concrete roof than one made of straw and grass. Since their houses are located in hilly areas, it is very difficult when it gets windy to live in the traditional houses, as its roof is not sturdy. Therefore, every household in our purview preferred concrete roofed houses. However, 7.18 percent of the households preferred the traditional mud floor.

Classification based on Loss	Amount	Number of households
Complete loss - 75 % and above	400000	16
60 % to 74%	250000	13
30% to 59%	125000	8
16% to 29%	60000	3
15%	10000	1

Table: 5 Satisfaction with the current house
Source: Primary Survey, 2019

Further, a majority of the households prefer mud bricks to build walls for houses rather than cement blocks. The prime reason behind it being that mud walls maintain a pleasant temperature
indoors. It is observed they also construct small traditional constructions are the attachment to the concrete houses and old people find more comfort in those traditional rooms attached with the RCC houses.

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indoors. It is observed they also construct small traditional constructions are the attachment to the concrete houses and old people find more comfort in those traditional rooms attached with the RCC houses. The present study has found that more than 53% of the beneficiaries did not invest any amount by their own for their house construction., while 3.85% invest bellow RS
5000. 13.25 % house hold invest around Rs 20000 and 5.52 invest up to Rs 30000.

Limitations of the Existing Housing Schemes

4.10 The housing schemes that are mentioned in the A-F list in the previous section were observed to not have considered the unique social and cultural aspects of traditional Muthuvan housing practices. All these housing schemes and policies were in fact designed to meet the housing needs of the rural communities, and the same was implemented among the Muthuvan community without any
modification or consideration. This inevitably produced negative results; many of the new concrete structures led to a loss in their traditional social system, and sustainable architectural practices, and adversely affected the cultural life of the Muthuvan people.

4.11 The houses constructed for the Muthuvan community, as a part of various housing schemes are of poor quality. Except in some Kudi located near to the township, where people pursue a job outside, where they involve in the construction process add to the design and overall quality. However, in most cases, where people lead their lives within the Kudi, the newly built RCC houses are found in dilapidated condition. The houses were found to have leakages on the roof, limited ventilation and poor design.

It can be observed from the condition of these houses that during their construction, the spatial design inside and outside of the house, which is significant to the social life of the Muthuvan community was not taken into consideration.

4.12 The Muthuvan people inhabit precarious land in the Western Ghats. The RCC houses constructed by the Government housing schemes damaged these fragile ecological zones in the Western Ghats. Similarly, the existing housing schemes have neglected the environmental and climatic conditions of the region. These lacunas of the existing housing schemes may contribute to further damages to the environment, thereby also adversely affecting the lives of its residents.

4.13 Beyond the nature of the building itself, the way the schemes are implemented among the tribal communities also contain acute problems. The study had found that rather than the community, it is the contractors involved in the process are reaping the benefits of these housing schemes implemented for the tribal people. The contractors involved play a critical role in implementing the housing schemes in the Muthuvan settlement. In some cases, it was also observed that the contractors insist that the tribal people apply for these schemes, and then they collect the ATM card from the residents to pocket the money coming through these schemes. Most of the houses constructed by contractors are of poor quality.

4.14The Muthuvan people currently residing in Kudi desire for concrete houses. Earlier, when the collective social life was widely practiced in the community, the need for housing arose only for couples getting married. The houses carried more significance in their culture, social order and livelihood practice than it does today. Now, the housing needs are largely inculcated by the housing schemes and its apparatus itself. With the advent of the various housing schemes, the people in the community are obsessed with housing in a fashion similar to that of mainstream societies. There is little chance of things going back to how it was. The issues that have arisen with these changing circumstances can be resolved only with a holistic consideration of the situation.

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A storehouse in Edamalkudi

Chapter
Five

The Need for a Holistic Housing Policy for a Sustainable Future

5.1 This ethnographic study explores three major aspects related to the unique housing and habitat practices of the Scheduled Tribe- Muthuvan community in the Idukki district of Kerala. Firstly, it explores the social and cultural aspects of the Muthuvan settlement life and their concepts of housing. Secondly, the investigation extends itself to the unique architectural tradition that exists among the Muthuvan community. Thirdly, the study

critically examines the housing schemes that were implemented among the Muthuvan community in the last four decades. In this chapter we will present a brief summary of the findings on these three aspects, and suggestions towards drafting a recovery policy to recuperate from the issues posed by the housing policies so far implemented.

The Socio-Cultural Aspects of the Muthuvan Housing

5.2 As already seen, a Muthuvan settlement has a sophisticated architecture with specific activities designate for every space. Compared to other tribal communities in the state of Kerala, the architecture of the Muthuvan Kudi is complex in terms of the number of built elements, and its role in the social and cultural life of the Muthuvan community. As mentioned, the traditional Muthuvan settlements have six built elements, which include Houses, Chavadi, Kulipura, Kavalveedu, Storeroom, and Temple. Mostly, the Muthuvan settlements are located in remote areas continue to have all the six built elements whereas those near mainstream seem to be losing out on this system. Today, most of the Kudi, located in remote places, also have an Anganwadi, a Lower Primary School and a Community hall built by the Government agencies. The life of Muthuvan people revolves around these built components, and it is of crucial importance to have an understanding of the life of Muthuvan people before planning and designing housing for the community.

5.3 Many of the architectural components in the Muthuvan settlement are unique to their culture and holds great relevance in their everyday lives. As a cultivating community, earlier they would move annually from one patch of the forest to another in the pursuit of identifying the most fertile land for farming. They engaged in the cultivation of ragi, rice, spices, and vegetables, primarily for their own

consumption. They have a strong sense of community and are observed to be generous among each other. The collective social life is a unique feature of the Muthuvan community, and the built elements in the settlement have a significant role in maintaining the deep collective feelings amongst themselves. They also follow strict rules in terms of value systems, political order, gender norms and, duties and responsibilities to sustain and protect harmony between their individual and social life. The built elements in the Muthuvan settlement play a significant role in the collective cultivation processes. The architectural components in the settlement are closely tied to their social structure, environment and occupation.

5.4 The findings of this study show that the demands and requirements of the Muthuvan community from their dwelling place is different from that of the mainstream society. As stated above, the collective feeling forms the core of the Muthuvan culture. The men and women spend most of their time working in the field. Therefore, the Muthuvan settlement would be found deserted for the most part of the day.

5.5 They usually cook once in a day, and eat only two meals, once in the morning and once in the evening. Only married couples stay in houses; boys, unmarried men and old people sleep in the Chavadi, some of them engage in duties at the guardhouse. Though now the girls sleep in the house, earlier they too stayed together in one place (Thomas 1962), whereas menstruating women stay in the Kulipura. Apart from being a shelter for married couples and a space for cooking and eating, a limited space in the houses is also used for storing seeds and grains. Many of the functional spaces in houses in modern societies such as a veranda, or a guest room is not an essential part of the Muthuvan houses, rather it is institutions such as Chavadi and Kulipura that hold functional importance for them.

5.6 Among the Muthuvan community, the need for construction of a house arises only when an individual gets married. The traditional Muthuvan house has constraints on inhabiting more than one family in a house. However, at present this is flexible. The community was self-sufficient in terms of providing shelter for themselves and carried out their own construction as and when need aroused. All community members inherited the techniques and knowledge for constructing mud houses.

Construction of a traditional mud house requires over 300 sticks of bamboo, 70 square meter unit of mud and the same amount of small stones, using which 12 people can build a house in 25 days. Both men and women are involved in the building process. The bamboo and straw are collected from the forest and the mud is collected from their settlement area. The men engage in the building process and the women do the finishing and polishing part of the construction.

5.7 The construction and maintenance of the houses and other built elements in the Muthuvan Kudi are carried out as a part of their routine. In the olden days, bamboo and other wild leaves were grown massively in their surroundings and thus they had easy access to these resources. Now, the restrictions imposed on accessing forest resources are a major issue while constructing their traditional houses and other built elements in the settlement. Therefore, the RCC house provided by the government agencies is the only hope for the community to meet their housing needs.

5.8 The traditionally constructed Muthuvan houses and other built elements are sustainable, eco-friendly and highly adaptable to the variations in weather when compared to RCC houses. The mud houses that the Muthuvan community construct has higher durability than RCC houses. However, the locals shared with our team of researchers that the traditional houses were unsafe during the monsoon and windy season.

The Problems in the Existing Housing Policies

Many of the architectural components in the Muthuvan settlement is unique to their culture and holds great relevance in their everyday lives. As a cultivating community, earlier they would move annually from one patch of the forest to another in the pursuit of identifying the most fertile land for farming.

5.9 The study has found a huge gap between the housing requirements of the Muthuvan community and the existing housing policies and schemes. The social, cultural, and environmental factors of housing have not been taken into consideration in any of the existing housing policies and schemes. It is also found that there are no housing policies in India that are designed specifically for the tribal communities, rather the policies and schemes designed for the rural and urban population without any alteration or improvisation are implemented among the diverse tribal population in the country.

5.10 The implementation of urban and rural housing schemes among the tribal communities neglects the diverse social and cultural requirements of the tribals. This has led the tribal people to assimilate into the rural social structure and culture. This research has found that the housing schemes that have been implemented among these communities have tampered their social structure and culture. The lives of most of these communities are now close to the ways of rural social life and these changes have brought with it drastic social, health, and cultural perils in the community.

Social Issues and Cultural loss

5.11 The present study exposes the drawbacks involved in the implementation of the housing policies and schemes among the Muthuvan community in the past four decades, and its effects on their social and cultural life. The findings show that these schemes have adversely affected the eco-friendly architectural practices of the Muthuvan community. The housing schemes have forced the community to assimilate to the mainstream culture; those who have assimilated to the mainstream culture seem to be suffering from social, cultural and economic issues. The social engineering and proper care, are severely lack in the governmental intervention of mainstreaming the tribal people. Inevitably the poor imagination of policies and its poor forms of implementation has caused social issues, economic crisis and cultural lose among the tribal people in general in post independent period.

5.12 The stories of Muthuvan people are not different. The present study had revealed that, the Muthuvan settlements where housing schemes are implemented largely, there people have more complaints on their perils. The housing schemes are forced to assimilate the Muthuvan people into rural social structure. But, unfortunately, the Muthuvan people, in general, are not well assimilated to the rural social life. Rather, the study had found that, most of the Kudi where the housing schemes are largely implemented are not fully assimilated into the rural social structure; instead

those settlements are placed on the fringes of the rural life. The family violence, neighbourhood conflicts, alcoholism, unemployment, increasing rate of suicide and health hazards ...etc are the major signs that will speak about the actual ground situation of the emerged social and cultural situation of the poor policies.

Lack of Vision in the Housing Policies

5.13 The existing housing schemes have not considered the various built elements in the Kudi, which are of significant importance in the culture of the Muthuvan community. Rather, the schemes that were designed for the urban and rural population were implemented in the same form for a population with a completely different lifestyle and social institutions. The Chavadi and Kulipura are two important structures in the Muthuvan settlement which have not been incorporated into the housing schemes. Some agencies have provided Chavadi and Kulipura in a few Kudis, however, the housing schemes have not considered this crucial institution during planning. This change of structure has led the Muthuvan community to a newfound obsession for housing and private spaces, as opposed to their collective interests in to individual and gender specific spaces that are more common earlier.

5.14 The Muthuvan community uses the interior and exterior spaces of their houses differently compared to rural or urban communities. The houses constructed for the community by the Government agencies have not taken these details into consideration. The houses that were built under these schemes have made life inside the house better for the community, but the life that existed outside the house is vanishing. The collective nature of the community is gravely affected as their common spaces are not included in the plan implemented by various policies and schemes. Several of the houses built for the community contain attached toilets, which the residents are not comfortable with and most of them use as storage spaces.

5.15 These schemes that provide free houses also disrupt the everyday routine, social structure and the cultural behavior of the Muthuvan community. Firstly, it makes them free from certain important activities in their everyday life, for instance collection of raw meterials for house construction after their everyday work. With the advent of housing schemes the community who was once self-sufficient is now dependent on Government aid for housing. Or, in other words, the repair and maintenance, of the houses and other built elements in the Kudi need external interventions also.

5.16 The existing housing policies have not looked into the existing architectural practices of the community. The PWD construction code limits the scope for adapting and incorporating existing construction techniques in the community. Thus, the community has been subjected to 'jump factor' in the field of housing. This negatively affects both the social and environmental world of the community.

5.17 The issues discussed here are complex and have many layers that need to be explored. Immediate attention and affirmative action are required to recover from the present situation, to solve the gaps found in the existing policies and schemes. The government and other stakeholders in the field need to come together and attempt to solve these issues. It has been identified in this study that the primary issue faced by the Muthuvan community is not the lack of housing but the inappropriate design and implementation of the Government housing policies and schemes. Therefore, the policy recommendation needs to look at the housing schemes and policies holistically than merely focussing on providing houses to Muthuvan people.

Need for a Holistic Housing Policy

5.18 The existing housing policies and schemes in the country address only the economic aspects of the housing problem. Thus, social, cultural, and environmental factors remain largely ignored while

planning. Similar plans are implemented across social, cultural, and ecological differences without taking into account the significance of the materials used or utility of the designs with regard to the requirements of the intended beneficiaries. A transdisciplinary approach is required in the housing policy studies in order to solve the fundamental issues that exist in the housing schemes in India. A collaboration of anthropologists, architects, economists and ecologists are to be brought together to gather a holistic perspective on the issues.

5.19 As elaborated in the introduction, a new specialization in housing studies have a remarkable role to play in understanding the relationship between social structure and culture of a society or a community with their housing and other built elements. The ethnography of housing has a significant role in designing housing policies for culturally distinguished groups such as indigenous and tribal people. Our housing policy practitioners and academics need to utilize the scope of ethnography of housing. Therefore, the study recommends incorporating ethnographic approaches in housing studies in order to draft better housing policies and schemes.

5.20 Currently, there is no housing policy existing in the country or in the state of Kerala that shapes and controls infinite and uncontrollable obsession for housing that exists among the high- and middle-income people. For them, emotions of esteem desire and class mobility are attached to the housing. To fulfill this esteem desire of a sect of people they are utilizing large amounts of natural resources and also produce large amounts of carbon emissions. The government needs to take serious measures to control people's high obsession with houses. Until unless such restrictions are enacted, there is no scope for recommending restriction against the housing desires that are already calculated among the tribal people by the wrong implementation of housing schemes. Therefore, the study recommends for making a holistic housing policy that cover all aspects of housing for all segments of people.

5.21 At the workshop organized as a part of this project, the stakeholders and experienced civil engineers pointed out that the existing building code of the Public Work Department (PWD)

does not permit the construction of mud house and bamboo constructions which make it difficult to incorporate indigenous housing models into Government housing schemes. This study recommends reframing or reviving the bygone building code of PWD and incorporating trends from the field of sustainable and green architecture.

Housing Policy for Tribal Communities

5.22 It has been seven decades since independence and we still don't have a comprehensive policy frames to direct and manage properly the outside engagement with the tribal people. A comprehensive tribal policy is the need of the hour. All Governmental and non-Governmental engagement with tribal people including the implementation of various schemes and other aids should be carried out according to the policy. The enacted tribal policy can also restrict the implementation of schemes that are designed for rural and urban poor, amongst the tribal people.

5.23 The Governmental and non-Governmental housing interventions need to be well defined after conducting an evaluation of the existing situation among the each tribal community in the state. The present study, conducted among the Muthuvan people had found that the housing schemes account for a major share of the Government funds for tribal people. It also reveals that health and education are given lesser importance as compared to the fund provided for the construction of houses. This unbalanced approach has led to further problems. The study strongly recommends the Government to give priority to education and health sector over housing among communities such as Muthuvan. The study points to the many issues that exist in the functioning of the various housing schemes. A comprehensive tribal policy can help solve these issues.

5.24 The nexus of contractors and bureaucrats who are illicitly reaping benefits out of the policies drafted for the welfare of the tribal people is another key issue. The study strongly

5.24 The nexus of contractors and bureaucrats who are illicitly reaping benefits out of the policies drafted for the welfare of the tribal people is another key issue. The study strongly recommends the Government to take necessary steps to resolve these issues existing at the ground level. The study observes that many officers in the Tribal Development Department in Kerala, who work among the tribal people, do not hold an academic degree in anthropology or rural/tribal sociology. Officers who are working among the tribal people for the Government must be qualified in any of these disciplines for an effective understanding of the requirements at ground level. As per the current norms in the Tribal Development Department in Kerala, a person who is employed as a Lower Division Clerk in the Department can gradually be promoted to the role of a Tribal Development Officer. The study recommends the Government to assign key roles in this regard strictly based on academic qualification, experience and expertise in the area.

5.25 The country also lacks a tribal housing policy; therefore, the study strongly recommends the Government to take affirmative actions to frame a nationwide tribal housing policy to protect the culture and livelihood of the tribal people and the environment. Currently, rural and urban housing policies are implemented among the tribal people as we lack a tribal housing policy in the country. Implementation in the absence of an understanding of the community's requirements leads to greater problems than solutions. A scheme or a policy for constructing houses for the tribal people must be formulated which prioritizes their social life and culture.The country has a wide network of Tribal Research Institutes across major states. But there is little research taken up by the Tribal Research Institutes that delves into the housing issues of tribal people. Hence, the study recommends the Tribal Research Institutes in the country to undertake research towards forming a holistic tribal housing policy in each state. The Tribal Development Departments and Tribal Research Institutes must collaborate to provide better schemes for the tribal people in the States. Currently, there is little linkage between the two, at least in Kerala.

5.26 The Government needs to take affirmative action to solve the issues that exist in the implementation of the housing schemes among the tribal communities. It would be ideal if the Central, State Governments appoint a high-level committee to find adequate solutions to the various issues related to housing.

Recovery Policy Muthuvan Housing

5.27 The study shows that Muthuvan settlements in the Idukki district can be categorized into three, based on their settlement patterns. In the post-independence period, the settlements of the Muthuvan community were subjected to drastic transformations. This led to drastic cultural transformation and there was an assimilation of the Muthuvan community in Idukki district across geographic differences. The eastern Muthuvan seems less transformed as compared to the Muthuvan living in the western side of the district. Among the eastern Muthuvan, those who reside next to the township have changed more than those who live deep inside the forest.

5.28 Therefore, the settlements of the Muthuvan community can be categorized into three based on their proximity to rural settlements and their perseverance to maintain traditions. The first category is settlements where the housing schemes were implemented in a relatively later period and therefore the community continues to value the traditional social structure and culture. The second category is where the housing rapidly changed the traditional settlement pattern but community life still exists. The third category is found mostly on the western side where the traditional institutions and culture have been forsaken and rural lifestyle adopted. Each of these three categories of Muthuvan settlements needs a different consideration while implementing any further housing schemes or policies.

5.29 For the first two categories, we would like to make a few recommendations for upcoming housing policies. To start with, instead of housing schemes

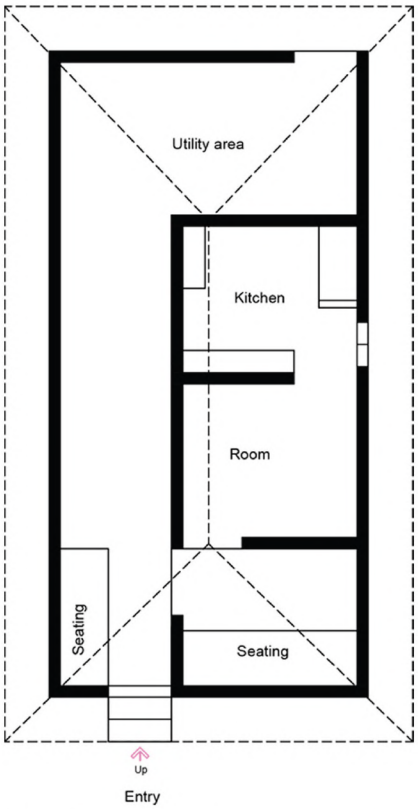
that provide individual houses, a comprehensive settlement plan must be designed by involving community members and transdisciplinary experts. The plan should cover all the required built elements, areas for cultivation and must consider both indoor and outdoor areas of the settlement. Rather than restricting the community to being a beneficiary of the housing schemes, the proposed policy and schemes should aim to enable the community to build their own houses using materials from their surroundings or nearby places that are accessible to the community. This, though seems to be a romatisation of the phenomenon, in the real world experience it is not so. At Edamalakudi, we come across one Mr. Thangappan who aesthetically constructed a traditional Muthuvan house by his own, taking note of his past experience of wild elephant attacks; rain water drainage and ecology of the area (See the figure 1 and 2).

5.30 For categories one and two of the Muthuvan settlement, the Government needs to prepare a comprehensive settlement policy and make an affirmative action plan to recover from the damages made by the existing housing schemes.

Figure - 1&2 shows the house constructed by Thankappan, who live in Edamalakudi. He himself constructed his house, using tradition technology but invested new idea in architecture and design. The mud house, that he constructed, according to his claim, is capable to survives wild animal attacks. And, the house seems adaptable to the climate of Edamalakudi. It is planned in such a way that inner core of house is protected by an outer passage space. Inner core comprises bedroom, and kitchen space and outer envelope includes living, passage and utility spaces. The construction method of traditional building is also improvised by adding plinth of rubble masonry, bamboo rafters and posts.

5.31For the third category of settlement, the existing policies and schemes have tampered the social structure and culture of the community as a tribe. Muthuvan people in this category of the settlement have given up the collective way of life; they now lead a family-centric life that is similar to the social structure of rural life. It is perhaps too late to implement a recovery policy, and therefore, we recommend the respected bodies to continue the current schemes, with a better and more effective implementation of the same.

HAND MADE HOME OF MUTHUVAN THANKAPPAN



Plan Thankappan's mud house

PLINTH raised to 2 feet to avoid dampening of mud floor due to the rainwater flow .

Small foundation is built for better stability of the building.

foundation and plinth is done in rubble masonry with mud mortar.

Walls are supported by bamboo or wooden posts.
walls are constructed as traditional muthuvan wattle and daub walls.

Roof is thatched with grass and to avoid leakage turpolin is placed as a layer between thatch and rafters.

There is a variation in planning of the house also. it is planned in such a way that an additional verandah surrounds the iner portion of the house.
house consists of a hall, a room, a kitchen and a long lobby is attached to it. it acts like a protection to the rooms.

The wall is wattle and daub and plastered with mud and cow dung. Mud house of Thankappan remembers of the skill of sustainable construction techniques of Muthuvan

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